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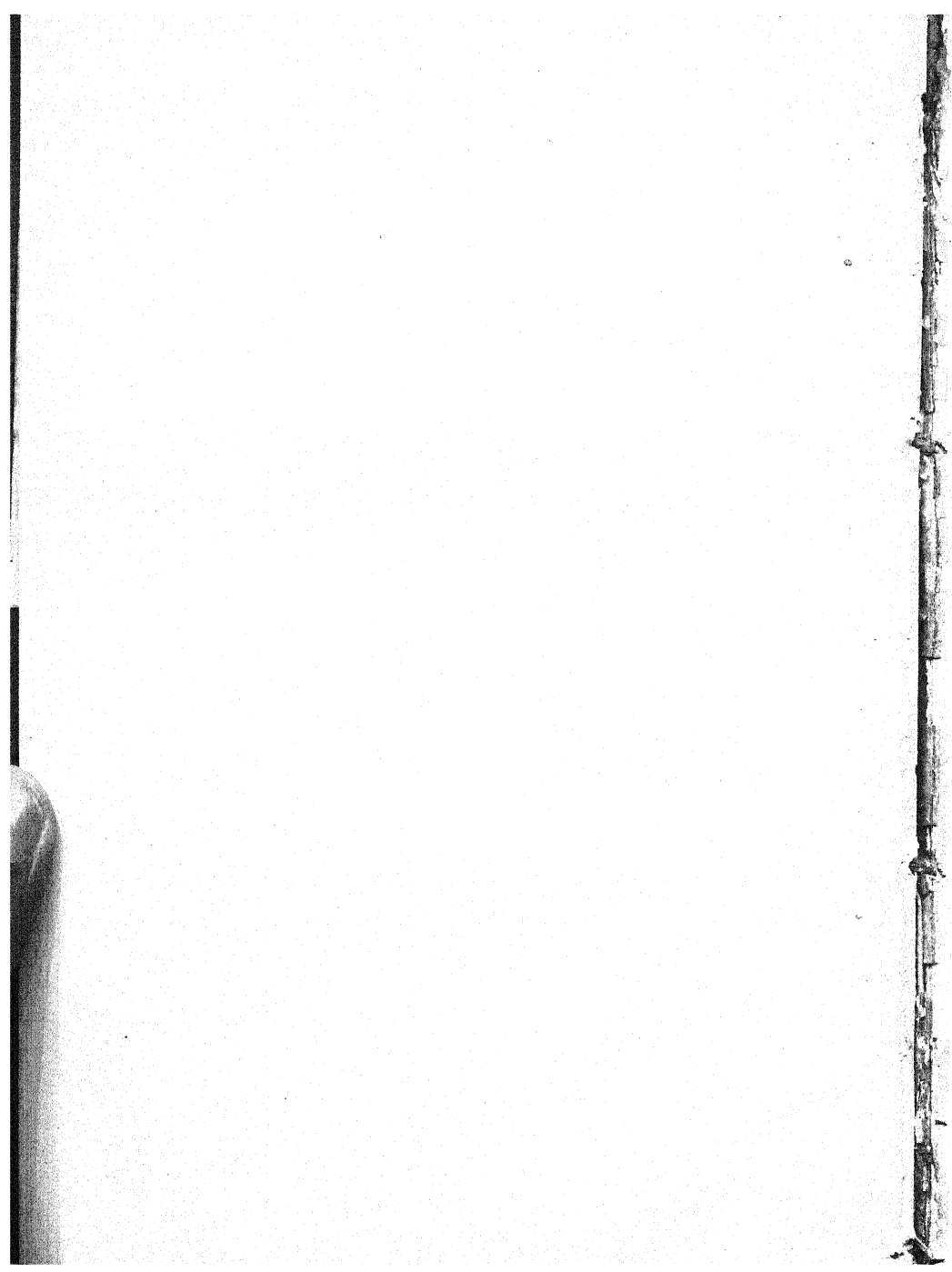
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I.

EUGENIUS AND HIS EASTERN COLLEAGUES.

[SEE PLATES I-III.]

IN two former papers I have attempted to illustrate the course of the *siliqua*-issues of Treveri from the accession of Valentinian I to the death of Maximus and the supersession of his **VIRTVS ROMANORVM** ("Throne" type) by Valentinian II's brief revival of Gratian's **VRBS ROMA** ("Cuirass" type). The present notes are in direct continuation of the former.

For some reason difficult to explain **VRBS ROMA**, while continuing to be struck at Lugdunum, was soon supplanted at Treveri¹ by a new **VIRTVS ROMANORVM** ("Cuirass" type). This persisted unchanged except in minute details throughout the remainder of Valentinian II's reign and thenceforward without break up to the date in the reign of his successor, Eugenius, at which Treveri ceased altogether for a long interval to strike in the precious metals and perhaps also in bronze. The precise date of this cessation can only be inferred. The fact that Victor's *siliquae* from Treveri are rare in comparison with the numbers from the Italian mints, suggests that little or no silver was struck for him there after the departure of Maximus for Italy in 387. If we can argue a like stoppage for Eugenius on his leaving Gaul for Milan in the spring

¹ Von Koblitz (*Die Münzstätte Treveri*) instances an *Urbs Roma* of Eugenius from Treveri as in the Dresden collection. But on applying for a cast I was told that the coin was not there.

of 393, we must admit a very intensive coinage of *siliquae* during the first six or seven months of his usurpation. The example of Maximus will, perhaps, have prepared us to expect this.

An inquiry into the *siliqua*-issues from Treveri might be appropriately ended with the end of those issues. But meanwhile our historical interest has been stimulated and will not be so easily satisfied. The action of Eugenius in advancing to Italy was certainly provocative, and we shall wish to see in what spirit his issues from Mediolanum continued his issues from Treveri. I have therefore added a short account of his *siliqua*-coinage from that mint.

The historical background of the coinage.

Our ancient authorities are meagre and discrepant. Zosimus states that after defeating Maximus in August 388 Theodosius restored to Valentinian II all his father's former empire, incorporated the flower of the beaten army with his own, dispatched Valentinian to manage the affairs of Italy, Gaul, and "all that lay within the sphere of his rule", and himself returned to Thessalonica. Here all seems to happen in rapid succession, but we know that Theodosius remained in Italy and conducted its government and that of his own eastern empire till the summer of 391. Socrates, a Church historian, and Sozomenos, who copies him, imply that Valentinian accompanied Theodosius in his triumph at Rome in 389. But this is *a priori* unlikely, as Theodosius would wish Valentinian well out of sight and mind of his hereditary subjects whose affections were to be transferred to the young Honorius whom he took with him. A more decisive argument

for Valentinian's absence is that the orator Pacatus, who delivered a panegyric on this occasion, could not have ignored him, had he been present. On the other hand, the Codex Theodosianus gives positive evidence of Valentinian's presence in Gaul at this very moment. We must either with Mommsen follow Socrates and attempt to explain away the evidence of the Codex, or, with Seeck, follow the positive evidence of the Codex and the negative evidence from Pacatus and agree that Socrates is in error. I think there can be little doubt that Seeck is right.

We know virtually nothing of Valentinian's life in Gaul for the next three and a half years except the final dramatic scenes of his unsuccessful attempt to escape from the tyranny of Arbogastes. He still regarded himself, and was regarded by the Italians, as ruler of Italy, and it was the refusal of Arbogastes to allow him to go to the assistance of Milan, which seemed threatened by barbarians, that led directly to his suicide.

No doubt Arbogastes had been acting under orders from Theodosius, but, no doubt also, those orders did not include Valentinian's death. However, trusting to an embassy composed of Gallic bishops to convince Theodosius of his innocence, he meanwhile carried on the government of Gaul as his representative (Seeck, *Gesch. des Untergangs der Ant. Welt*, v. 537). All might have gone well for Arbogastes had not the mind of Theodosius come at this moment under the influence of a strong anti-pagan reaction. Arbogastes, a pagan, saw his fall imminent. As a barbarian he could not make himself emperor, but as an able soldier and administrator he could still rule through a

puppet-emperor, and on August 22, more than three months after the death of Valentinian, he proclaimed as emperor Eugenius, a Court official, nominally a Christian but known to be very tolerant of the paganism which still maintained itself in many high places.

Zosimus, in making Valentinian's death a murder to which Eugenius, already his destined successor, was a party, seems here also to be following an "official version" favourable to and fostered by the Theodosian House which had risen on the ruins of the House of Valentinian, to which it owed its beginnings.

Eugenius made at first every effort to reach a friendly understanding with Theodosius. He approached him through an embassy; took no steps to secure Italy, which, nominally restored to Valentinian II on the death of Maximus, might justifiably have been claimed by his successor; and refused to re-establish the pagan worship at Rome. But Theodosius made no answering gesture. He neither recognized the consulship of Eugenius nor consulted him in the elevation of his younger son Honorius to the rank of Augustus. The reply of Eugenius was the restoration of pagan observances at Rome and the occupation of Milan. Theodosius would be touched to the quick in his most cherished schemes, spiritual and temporal, for he was a "most Christian" emperor and he had destined Italy for Honorius. Still, as we have seen, Italy could hardly be made by Theodosius a pretext for war, and Eugenius, unlike Maximus, carefully refrained from any hostile movement beyond its borders, thereby showing, as Seeck says, that he had not yet given up all hope of a peaceful settlement. It was a vain hope. Theodosius was only biding his time, and when ready, attacked and

defeated Eugenius at the battle of the Frigidus in September 394.

General view of the coin-evidence.

Treveri and Mediolanum are, of course, not the only mints, nor the *siliqua* the only denomination, to which we might look for evidence, but, outside these, little, I think, will be found bearing on the limited subject of these notes.

The Dortmund hoard of 430 *solidi*, and the Terling mixed *N* and *A* hoard with 26 *solidi*, together contain for this period 19 of Treveri, 10 of Mediolanum, and 8 of Lugdunum. From Treveri Valentinian II has 14 *solidi*, Theodosius 3, Eugenius 2; from Mediolanum Valentinian II 5, Theodosius 2, Arcadius 1, Eugenius 2; from Lugdunum Valentinian II 6, Eugenius 2. While interesting as showing the relative importance of the gold-striking mints during this time the *solidi*, with their multiples and fractions, have made no contribution to my present inquiry beyond one reverse identity linking Theodosius with Valentinian II at Treveri. Lugdunum struck also the *siliqua* VRBS ROMA in fairly large numbers. Records of five hoards give Valentinian 41, Theodosius 10, Arcadius 11, Eugenius 28. My own coins and casts give them respectively 41, 9, 9, 23, and link Theodosius with Valentinian II by three identities, Arcadius with Valentinian II by one. I have found none linking the eastern emperors with Eugenius, although most of the coins of Arcadius have closer resemblance to Eugenius than to Valentinian II in the treatment of the drapery of the left arm. In bronze all the three Gallic mints struck the *Æ* 4 VICTORIA AVGGG in the names of all the emperors.

These coins are mostly in imperfect condition and little or no certain evidence has been gained from them. Those of Arcadius largely predominate, but we can only guess at the striker. Lugdunum and Arelate have throughout the unvarying division **VICTOR—IA AVGGG** and an unvarying form of mint-mark, except for *officina* letter. At Arelate Arcadius and Honorius seem always to have unbroken obverse legend; at Lugdunum Arcadius generally unbroken, sometimes broken, Honorius always unbroken, except in the very rare $\frac{V}{LVGP}$ issue, noted only for him and Arcadius, and possibly post-Theodosian. No doubt—though we could hardly prove it—both Valentinian II and Eugenius struck bronze, as they certainly struck silver, for Arcadius. The much scarcer coins of Honorius with unbroken obverse legend must, I think, have been struck in his father's lifetime, but whether by Eugenius—which seems very unlikely—or in the few months after Eugenius' downfall I see at present no means of determining. Certainly Eugenius struck no silver for him. Treveri with its twofold reverse division **VICTOR—IA AVGGG** and **VICTORI—²A AVGGG** and its twofold mint-mark \overline{TR} and \overline{TRP} should be helpful when the evidence from its comparatively rare $\mathcal{A}E$ 4 has been carefully collated. As Arcadius appears here, in contrast to the other two Gallic mints, with the broken form of obverse legend throughout, we

² Eugenius certainly struck this with division **VICTOR—IA AVGGG** and m.m. **TR**, but a coin of his in my possession shows also division **VICTORI—A AVGGG**. The m.m. is illegible, but the coin must be of Treveri.

can base no inference of date on the fact that the very few coins of Honorius from Treveri give him also this broken form. In Italy Eugenius struck his **Æ 4 SPES ROMANORVM** "Victory advancing l." at Aquileia, but I have seen no evidence that he struck it for Theodosius. A solitary coin seems to show that he struck it also at Rome. The type, but in silver, is given by Cohen (32) for Theodosius with Rome mint-mark, and a specimen is to be seen in the Vienna Cabinet. For really satisfactory evidence that Eugenius struck for his eastern co-regents we must look to the *siliquae* of Treveri and Mediolanum.

TREVERI.

The first issue of *siliquae* after the recovery of Gaul from Maximus was **VRBS ROMA**, which has been described and illustrated in *Num. Chron.*, 1932, pp. 264-266, and Pl. XX. 3-7. This is very rare and must soon have been superseded by **VIRTVS ROMANORVM**. The type is the same for both, viz. Rome seated l. on cuirass holding Victory on globe and reversed spear (often shown without barbs in **VRBS ROMA**). I give their respective numbers as they occur in seven published hoards, adding in brackets those of my own coins and casts: **VRBS ROMA** Valentinian II 8 (4), Theodosius 4 (6), Arcadius 6 (8); **VIRTVS ROMANORVM** Valentinian II 75 (41), Theodosius 183 (78), Arcadius 71 (69), Eugenius 42 (59). The chief discrepancies between the numbers of my own specimens and those recorded in the hoards arise from the unusually large proportion found for Valentinian II and Theodosius in the N. Mendip hoard and are,

no doubt, due to special circumstances of which we are ignorant.

Eugenius carried on Valentinian II's **VIRTVS ROMANORVM** without change in legend or type, but, by observing small details of treatment in coins bearing their obverses, we can in most cases easily classify coins of Theodosius and Arcadius as "Valentinianian" or "Eugenian" which, with its historical implications, is the purpose of these notes.

Obverse Portraits.

There was, of course, at this period, no attempt at a true or consistent representation of an emperor's features, though Eugenius' beard gives a somewhat superficial consistency to his portraiture.

The very artificial classification of the portraiture by means of some small detail of the drapery will, I think, be most convenient. In the *siliquae* Eugenius and Arcadius have usually, Theodosius rather rarely, Valentinian II never, a long pendant attached to the circular fibula which fastens the cloak on the right shoulder. With this arrangement goes great similarity of features, and we recognize the work of a single school of die-sinkers. Similarly with the two "short pendant" varieties, which are each accompanied by a (generally) distinctive portrait or portraits; cf. the illustrations to **VRBS ROMA**, nos. 4 and 5, mentioned above, and to the *siliquae* of Maximus in *Num. Chron.*, 1935, Pl. XII, where what I called his "regular" portrait has a different arrangement of the pendant from that of the two other varieties of portrait which I ascribed to him. We thus have:

I. Short pendant with the three jewels arranged "pyramid-wise" ••, e.g. Pl. I. 1, which is clearly following the same model as VRBS ROMA no. 5. Like that it also has reverse identity linking it to a portrait of class II. There is a strong "family resemblance" between the portraits of class I, though they are certainly not all by the same hand, and a larger-featured version becomes common towards the end of Valentinian II's reign.

II. Short pendant with the three jewels arranged "inverted-pyramid-wise" ••, e.g. Pl. I. 10, which has reverse identity with the class I coin of Valentinian II and appears to follow the same model as VRBS ROMA no. 4. But as in the case of Maximus, the portraits of this class are more varied. They too tend to become larger towards the end of Valentinian II's reign.

Showing very similar features but a very distinctive treatment of the drapery is a variety of II, which I call II *var.* The drapery in this ends abruptly at the neck without showing any indication of the left arm. Contrast e.g. Pl. II. 7, 8. It must mark the work of a limited period and is useful as determining the contemporaneousness of the reverse varieties with which it occurs.

III. Long pendant with the three jewels arranged horizontally, e.g. Pl. I. 11, II. 9. The portraiture, especially of Theodosius and Eugenius, is very consistent.

For Eugenius class I is represented by Pl. III. 1. His beard is shaggy and his features roughly hewn. Class II, e.g. Pl. III. 2, rather less rare, generally represents him with beard curving outwards to a fine point. Class III, by far the commonest for him, gives us the typical Eugenius with incurved nose and closely trimmed beard, e.g. Pl. III. 3-7.

A remarkable peculiarity occurring in both II *var.* and III is the spelling ARCAPIVS for ARCADIVS. It is quite common, but seems to be found only with the one reverse variety B(c) in which Arcadius and Eugenius are linked by actual die-identities.

Reverse varieties.

Although the type is unvarying, its details vary, and vary so consistently that we must suppose this to be

deliberately contrived as a means of identifying the output of a given group of moneyers. The broadest basis of distinction between the coinage of Valentinian and of Eugenius is that in the former Rome's dress is not brought up over the arm that holds the Victory, in the latter it is. The few coins which violate this rule may, perhaps, fairly be taken as on the border line between the two reigns, and as marking respectively the latest of Valentinian and the earliest of Eugenius, as the portraiture also suggests. The numbers of each class noted by me for the four emperors are as follows:

"Dress not over arm": Val. II, 37; Theod. 47; Arcad. 0;
Eugen. 10.

"Dress over arm": Val. II. 4; Theod. 26; Arcad. 67;
Eugen. 49.

Each of these main classes can be subdivided according as:

- (a) Rome has, or has not, a V-shaped flap showing on her l. shoulder. Contrast e.g. Pl. I. 1, 2.
- (b) The Victory on the globe has her dress indicated (1) simply by a short line (rarely two lines) behind, forming an acute angle with the line which represents her legs, e.g. Pl. I. 4. (There is a "broad arrow" variety of this with short line also in front, e.g. Pl. I. 13); or (2) her dress is more elaborately represented by a kind of inverted flower-bell, e.g. Pl. I. 2.

None of these distinguishing details is new, except perhaps the "flower-bell" Victory. But when we find certain of them appearing consistently in combination to the exclusion of their alternatives, which in their turn appear consistently in other combinations, we must, I think, infer that the die-sinker is following a prescribed model.

We shall find that almost all the Treveran **VIRTVS ROMANORVM** *siliquae* of our period, A.D. 388-393, will come under one or other of the four following reverse-varieties. The numbers which I possess (in coins or casts) of each emperor are appended :

Mainly or exclusively "Valentinianian".

A. Dress not brought up over Rome's arm.

- (a) "Acute angle" Victory — Flap on l. shoulder.
Val. II, 33; Theod. 37; Arcad. 0; Eugen. 10.
- (b) "Flower-bell" Victory — No flap on l. shoulder.
Val. II, 4; Theod. 9; Arcad. 0; Eugen. 0.

Mainly or exclusively "Eugenian".

B. Dress brought up over Rome's arm.

- (b) "Flower-bell" Victory — Flap on l. shoulder.
Val. II, 1; Theod. 17; Arcad. 22; Eugen. 14.
- (c) "Acute angle" Victory — No flap on l. shoulder.
Val. II, 0; Theod. 8; Arcad. 45; Eugen. 30.

In this variety alone the spear is always shown as a continuous line, instead of as a series of dots, as in the three other varieties.

The few coins which do not fit into the above scheme are :

- (1) a definite group similar to A (a) but showing "dress carried up over arm". I call this B (a).

Val. II, 3; Theod. 5; Arcad. 1; Eugen. 3 (?5).

- (2) two unconnected coins showing individual treatment of reverse. Pl. II. 6 seems perhaps to stand to A (b) in a similar relation to that in which B (a) stands to A (a). Pl. I. 14 is of the A (a) variety, differing only in the unique representation of the little

Victory whose body is marked by a distinct cross. A Christian artist seems here to be taking his part in the bitter religious conflict waged round the Altar of Victory in the Senate House during this period.

We have seen that **VRBS ROMA** was struck by Valentinian II for both Theodosius and Arcadius. The only reverse identity which I have found to link two emperors in this scanty issue links him in fact with Arcadius, and in my experience the coins of Arcadius are the least rare. Yet in **VIRTVS ROMANORVM** Arcadius is entirely absent from the "Valentinianian" portion of the issue, coming into possible touch with Valentinian only in those borderline issues B (a) and B (b) in which Valentinian is represented by only one or two coins and is much outnumbered by Theodosius and Eugenius. Still more surprising than the absence of Arcadius from the "Valentinianian", is his predominance in the "Eugenian" portion of the issue. Gratian at Treveri had certainly struck more of his **VRBS ROMA** ("Throne" type) in his uncle's than in his own name, but at least Valens was the senior Augustus. Here it is not the senior Augustus, Theodosius, who has most of the "Eugenian" coinage, but the boy-Augustus, Arcadius. Unless a more plausible explanation is forthcoming, why Eugenius should give such prominence to Arcadius, I am driven to the conclusion that in striking, as he certainly did, for Theodosius and Arcadius he was merely continuing an issue which had been begun by Arbogastes during the interregnum. What better means of palliating his responsibility for Valentinian's suicide could Arbogastes have adopted than by emphasizing the opening it gave to Theodosius' own son?

We must see whether the coinage when examined in detail gives any support to this suggestion. Both style and the absence of Honorius preclude the possibility of any part of it being post-Eugenian.

The coinage of Theodosius is more normal. Both emperors strike for him, but he has more of the "Valentinianian" varieties than Valentinian himself, and I am inclined to think that some of these coins also date from the interregnum. It seems unlikely, indeed, that the mints remained quite inactive for the three months between May 15 and August 22, during which Arbogastes carried on the government.

The whole coinage is linked together by a chain of obverse and reverse identities, many of which are illustrated on **Pl. I-III**, and the evidence here collected, if not sufficing to unravel all the complexities of the issue, may at least be useful as a nucleus for further research.

There will be a gain in clearness as well as a saving of space, if I indicate these identities by a kind of "shorthand". Obverses are classified as I, &c., reverses as A (*a*), &c. If an obverse identity links two reverse varieties, I show this as, e.g., Theodosius I B (*b*) = I B (*c*). placing first the side of the coin in which the identity consists. If an identical reverse links two or more emperors, the equation would appear as, e.g., Theodosius B (*c*) II = Arcadius B (*c*) III = Eugenius B (*c*) III, i.e. with identical reverse variety B (*c*) Theodosius has the class II, Arcadius and Eugenius both the class III portrait.

Conspectus of combinations of reverse varieties (A (a), &c.) and obverse varieties (I, &c.) at Treveri.

A. Dress not carried up over arm.*

	A (a)				A (b)			
	I	II	III	I	II	III	I	II
Valentinian II .	25	8	—	2	2	—	—	—
Theodosius .	24	13	—	8	1	—	—	—
Arcadius .	—	—	—	—	—	—	—	—
Eugenius .	4	6	—	—	—	—	—	—

B. Dress carried up over arm.*

	B (a)				B (b)				B (c)			
	I	II	III	I	II	III	II <i>var.</i>	I	II	III	II <i>var.</i>	III
Valentinian II	3	—	—	1	—	—	—	—	—	—	—	—
Theodosius	4	1	—	3	5	2	2	—	2	7	3	3
Arcadius (D)†	1	—	—	1	5	—	—	—	8	17	—	8
„ (P)	—	—	—	—	—	—	—	—	—	—	—	—
Eugenius	—	2 (? 3)	1 (? 2)	4	6	2	2	—	2	2	8	21

* A (a) = B (a) except for this main class distinction. All other *rev.* varieties differ also in the combination of *différentiae*.

† Arcadius (D) and (P) denote respectively the spellings **ARCADIUS** and **ARCAPIVS** on the *obv.*

"Valentinianian" reverse variety A (a).

From the close resemblance of some of the portraits to those of VRBS ROMA, A (a) would seem to show the earliest coins of the succeeding VIRTUS ROMANORVM issue. It went on throughout the reign of Valentinian and into the reign of Eugenius. The obverses seem always to be of classes I and II, in both of which there is a tendency towards a larger style of bust at the end of Valentinian's reign.

Of I Valentinian has 25, Theodosius 24 examples; of II Valentinian 8, Theodosius 13. Reverse identities noted are:

(a) Linking Valentinian and Theodosius, who both have the smaller and, as I think, earlier style of portrait

Val. A (a) I = Theod. A (a) I.

Val. A (a) I = Theod. A (a) II [Pl. I. 1, 10; I. 3, 15]. The second equation is in the "broad-arrow" type of Victory.

(b) Linking Valentinian and Theodosius, who both have the later styles of portrait.

Val. A (a) I = Theod. A (a) II [Pl. I. 4, 12]. This portrait of Theodosius is the commonest for him of the class II, in which he outnumbers Valentinian in A (a), and is especially typical of his B (b) coins, a variety almost entirely post-Valentinian. It appears to me to be chiefly an interregnal portrait. B (b), it must be remembered, is commoner for Theodosius and Arcadius than for Eugenius, and the main body of this variety would seem to come between the two reigns.

(c) Linking A (a) with other reverse varieties.

Theod. II A (a) = II A (b) [Pl. I. 16, 17]. This portrait is of the larger and later type of the Valentinianian portraits. The features are unusually like those of class I.

Val. I A (a) = I B (a) [Pl. I. 4, 5]. The first of these has already been mentioned as having reverse identity with Theodosius; the second is doublestruck.

That A (a) was continued for Theodosius after the death of Valentinian is suggested by the predominating numbers of his typical portrait II, and proved by a coin with the portrait II *var.* which is certainly post-Valentinian. Eugenius has four examples with portrait I, six with portrait II. I have found no identity linking him with Theodosius. Arcadius has no A (a).

"Valentinianian" reverse variety A (b).

Valentinian II has 2, Theodosius 8 examples with portrait I: Valentinian 2, Theodosius 1, with portrait II. Some may have been struck for Theodosius after Valentinian's death, but the issue of this variety ended before the reign of Eugenius. Arcadius does not share in it. It is marked by unusually careful elaboration of detail, and is accompanied by a bold portraiture of the "larger-featured" style which prevailed at the end of Valentinian's reign. The single identity I have found linking the two emperors is: Val. A (b) II = Theod. A (b) I [Pl. I. 2, 18]. Valentinian's portrait seems to be of the style which is seen so commonly for Theodosius in A (a) and B (b).

A (b) is linked with A (a) in an equation given above. For the close connexion of A (b) with B (b) I compare, in default of an identity, the A (b) portrait of Valentinian [Pl. I. 6] with the B (b) portrait of Theodosius [Pl. I. 19]. I think we have here an argument for the immediate continuation after Valentinian's death of the B (b) issue, of which Valentinian has but one example, while Theodosius and especially Arcadius have so many.

Reverse variety B(a).

With portrait I Valentinian has 3, Theodosius 4, Arcadius 1, Eugenius 0, examples; with portrait II Theodosius has 1, Eugenius 2 certain, 1 doubtful. Of his other two, one is quite uncertain, the other interesting as an instance of his portrait III, which is very rare for Eugenius in reverse varieties which begin with Valentinian. I have already illustrated the connecting link between A (a) and B (a), and also an identity linking Valentinian (with the same portrait) and Theodosius in the A (a) reverse. The B (a) reverse gives also an identity: Val. B (a) I = Theod. B (a) I [Pl. I. 5 double-struck, 20]. There is still another Theodosius showing this identical reverse, with similar portrait but less rugged features. It is, perhaps, noteworthy that the end of the dress brought over Rome's arm stands up almost to the height of her shoulder, as if the die-sinker were determined that his conscientiousness in carrying out a newly prescribed *differentia* should not be questioned.

Theodosius' portrait II is of the style of Pl. I. 12, common for him in A (a) and B (b). The single example of Arcadius is very important. It is the only class I portrait that I have seen for him, and furnishes the useful identity: Arcad. I B (a) = I B (b) [Pl. II. 10, 11]. The portrait is precisely that which was employed for the senior emperors at the close of Valentinian's reign, but from the absence of Arcadius throughout the main portion of Valentinian's issue I am inclined to place it just after Valentinian's death.

"Eugenian" reverse variety B (b).

This is one of the "borderline" varieties. From its "flower-bell" Victory it seems to be the direct descendant of A (*b*). Compare, too, the A (*b*) portrait of Valentinian [Pl. I. 6] with the B (*b*) portrait of Theodosius [Pl. I. 19].

The single example for Valentinian II is enough to show that it began before his death. It is most frequent for Theodosius, and especially Arcadius, but is by no means rare for Eugenius. The numbers found for each emperor with the several portrait varieties are:

I. Valentinian II 1; Theodosius 3; Arcadius 1; Eugenius 4.

II. Theodosius 5; Arcadius 5; Eugenius 6.

II *var.* Theodosius 2; Arcadius 0; Eugenius 2.

III. Theodosius 7; Arcadius 17; Eugenius 2.

The two reverse varieties B (*a*) and B (*b*) are closely connected by the portraiture. We may compare the portraits of Valentinian [Pl. I. 7] in B (*b*) and Theodosius [Pl. I. 20] in B (*a*), as well as the single class I portrait of Arcadius, which is identical for him in the two varieties [Pl. II. 10, 11].

These coins of Arcadius clearly fall at about the very end of Valentinian's reign, but whether just within, or, as I have argued, just outside cannot be proved with certainty. However, his other twenty-two B (*b*) coins clearly fall outside, and the question arises whether they were struck for him in the interregnum or later by Eugenius.

I have noted no identities in B (*b*) linking Arcadius

with either Theodosius or Eugenius, but two linking Theodosius with Eugenius.

The identities found for Arcadius are:

Arcadius II B (*b*) = II B (*c*) [Pl. II. 12, 13].

Arcadius III B (*b*) = III B (*c*) [Pl. II. 14, 15]. There is also another identity linking B (*b*) and B (*c*).

B (*c*) certainly started later than B (*b*), but certainly went on side by side with it. B (*c*) is remarkable for showing in the majority of Arcadius' coins the spelling (or form of writing) **ARCAPIVS** for **ARCADIVS**, and it is with this spelling that Arcadius occurs in six out of the seven instances in which he is brought into connexion with Eugenius by identities, six direct, one through Theodosius. This spelling is not found at all for Arcadius in B (*b*), and we seem justified in inferring that B (*b*) and the portion of B (*c*) which shows the correct spelling are pre-Eugenian and possibly inter-regnal.

Identities linking Theodosius with Eugenius are:

Theodosius $\left\{ \begin{array}{l} \text{B } (b) \text{ II} \\ \text{B } (b) \text{ II var.} \end{array} \right\} = \text{Eugenius B } (b) \text{ II var.}$ [Pl. II. 1; III. 2].

The portrait II of Theodosius, which I possess only as a rubbing, is of the style of Pl. I. 12; II. 2.

Theodosius links B (*b*) with B (*c*) in Theodosius III B (*b*) = III B (*c*) [Pl. II. 3; I. 11]. The B (*c*) portrait shows a battered state of the die. In this instance, then, B (*b*) is earlier than B (*c*). The portrait III of Theodosius is virtually unvarying. It is rather scarce for him, though by far the commonest for Arcadius and Eugenius. I have not found him connected with Eugenius in this portrait, which seems used for him during the period which preceded the spelling

ARCAPIVS, and is therefore probably interregnal. His four identities with Eugenius have either II or II *var.*

My impression is that, when on the death of Valentinian II B (*b*) and presently B (*c*) began to be struck predominantly in the name of Arcadius, a new work-group designed a new portrait for him which was regarded as peculiarly his own, while the portraits of Theodosius continued to be produced by the work-groups I and II; but, as we have seen throughout the whole course of the coinage from Valentinian I downwards, the portraits of emperors were interchangeable. That is, a group accustomed to provide obverse dies for one emperor, would, when called upon to provide them for another, still produce the same portrait or style of portrait. In this way I should explain the less usual portraits of both Theodosius and Arcadius.

Identities of Eugenius linking B (*b*) with other reverse varieties are: Eugenius I B (*b*) = I A (*a*) (I have only a rubbing of the A coin) and Eugenius III B (*b*) = III B (*c*) [Pl. III. 3, 4]. The portrait III of Eugenius is very rare for him in B (*b*), very common in B (*c*). Here B (*b*) shows a less perfect state of the obverse die.

"Eugenian" reverse variety B (c).

This seems to be definitely post-Valentinianian. Portrait I seems also not to be found with it. The other portraits occur as follows:

II. Theodosius 2; Arcadius 8; Eugenius 2.

II *var.* Theodosius 3; ARCAPIVS 8; Eugenius 0.

III. Theodosius 3; { ARCAPIVS 8
ARCAPIVS 21 }; Eugenius 28.

With B (*c*) the portrait II of Theodosius, e.g. Pl.

II. 4, follows a different model from that seen in his B(b) coins, e.g. Pl. II. 2. Portrait II of Arcadius follows the former model both in B(c) and B(b), linking them by the identity given above [Pl. II. 12, 13]. Other identities, e.g. Pl. II. 14, 15, link them by his portrait III. I have suggested that these coins, which all show the normal form of his name, may be interregal. The fact that Theodosius has so few of this variety compared with Arcadius, and that his portrait II is of the later model, seems to show that B(c) is at first pre-eminently "Arcadian". Afterwards, when ARCAPIVS Eugenius appears and half of his total number are struck in this variety.

There are many identities which help towards a relative dating of these portrait varieties. Unfortunately it is not often possible to argue with assurance from the state of the die. All those in which Arcadius occurs, with one exception, give him the form ARCAPIVS.

Theodosius B(c) II = ARCAPIVS B(c) III [Pl. II. 16]. The Theodosius has obverse identity with the next.

Theodosius B(c) II = Eugenius B(c) III [Pl. II. 4 ; III. 5].

ARCAPIVS B(c) III = ARCAPIVS B(c) II *var.* [Pl. II. 17, 7]. The first of these has obverse identity in a worn state of the die with the Arcadius of Pl. II. 16, which shows the die in a newer state. We thus find portrait II in use for Theodosius, while Arcadius and Eugenius both have III, and we see that III was in use—in this group, at least—for Arcadius before II *var.*

Theodosius B (c) II *var.* = ARCAPIVS B (c) III. Also with identical obverse of Theodosius, we have:

Theodosius B (c) II *var.* = ARCAPIVS B (c) III = Eugenius B (c) III [Pl. II. 5, 9; III. 6].

Theodosius B (c) III = ARCADIVS B (c) II [Pl. I. 11; II. 8]. Here the Theodosius has obverse identity with the B (b) coin [Pl. II. 3], which shows a less worn state of the die. As Theodosius has his portrait III, and Arcadius his normal spelling, I am inclined to think these two coins a little earlier than those preceding. But the next equation shows that ARCADIVS is also found linked with coins of Eugenius: ARCADIVS B (c) II = Eugenius B (c) III [Pl. II. 18; III. 4]. The coin of Eugenius is that with the portrait linking B (b) and B (c). As portrait III is very rare for Eugenius in B (b), it may here come early in his reign before his regular combination of III with B (c), I and II with B (b) had been established. His single identity with ARCADIVS seems to suggest an early date.

Lastly:

ARCAPIVS B (c) II *var.* = ARCAPIVS B (c) III = Eugenius B (c) III [Pl. II. 19, 20; III. 7].

We here run into a nest of identities. The Arcadius of Pl. II. 20 has obverse identity with one other, the Eugenius of Pl. III. 7 has obverse identity with three others of my specimens. With this one obverse of Eugenius and these two of Arcadius occur three reverse identities linking the two emperors. When states of dies can be distinguished, it is the coins of Eugenius that appear to be the later. But I have found no decisive evidence on this point. In default of an explanation, why Eugenius should strike all these coins for Arcadius, one might suggest that the early coins of

Eugenius may have been struck with reverse dies previously in use for Arcadius. But the percentage of identities is, I think, far too high to leave room for doubt that Eugenius struck largely at Treveri for the legitimate emperors.

General conclusions.

To sum up—the groups of workers who provide the obverse and reverse dies seem in each case to follow a pattern prescribed by authority, which would enable their respective outputs to be recognized. If we, too, can recognize these, we shall have a valuable clue to the intricacies of the **VIRTVS ROMANORVM** issue.

During Valentinian II's portion of the coinage there were two such groups I and II (II again being subdivided) responsible for the obverses; two, A (a), and later, A (b), responsible for the reverses. At the end of the reign B (a) starts as a variety of A (a), which still went on. A (b) was either discontinued within the reign, or, as seems to me more likely, still went on a little while for Theodosius. B (b) starts just within the reign, apparently as a variety of, or, perhaps, in place of, A (b). They both have the very distinctive "flower-bell" Victory. B (b), seen for Valentinian II in a single coin, is the variety which more than any other marks a time when the coinage seems to be restricted to an output in the names of Theodosius and, especially, Arcadius. The portrait of Arcadius [Pl. II. 10, 11] suggests the closest connexion with the Valentinianian coinage, but rather than regard it as an isolated example of Arcadius in Valentinian's part of the issue, I am inclined to bring it into connexion with the main body of B (b) and to

see in it Valentinian's portrait [cf. Pl. I. 4] transferred at his death to his natural successor in the government of Gaul. However, a new portrait III was soon evolved for Arcadius, and remains the most characteristic for him throughout the whole issue. It is rare for Theodosius, whose coinage henceforth in general is comparatively rare. For Theodosius portraits I and, especially, II are most usual in B (*b*) and B (*c*), and II is not uncommon, though far less common than III, for Arcadius. It is noteworthy that B (*b*) besides occurring in greater numbers for Theodosius and, especially, Arcadius, offers no identities linking Arcadius with Eugenius. This suggests that Arcadius' B (*b*) coins fall within the interregnum. On the other hand, Theodosius is linked by two coins with Eugenius in this reverse variety, both with portrait II, which is also the regular portrait of Eugenius in B (*b*). I think these coins were struck in his name by Eugenius, while the coins of Theodosius with portrait III probably fall within the interregnum.

B (*c*) seems to have been initiated for Arcadius soon after Valentinian's death. It is very common for him, but rare for Theodosius. I have three identities linking B (*b*) and B (*c*) coins of Arcadius, one with portrait II, two with portrait III. I cannot at present say which portrait is the earlier in these instances, as both went on side by side. But it is important to notice that in all these three B (*c*) coins of Arcadius, the spelling of his name is the correct **ARCADIVS**, which in this B (*c*) variety is much less usual than **ARCAPIVS**. It is almost exclusively with this latter spelling that he comes into touch with Eugenius, which is again an argument in favour of a pre-

Eugenian dating of his B (b) coins, and that part of his B (c) coins which show the "correct" spelling of his name.

But the great majority of his B (c) coins have the "D" of his name written as "P". It is so written on all these coins with portrait II *var.* and must, I suppose, represent a new fashion in writing. At this point of the coinage Eugenius appears, but, from his comparative rareness with the II *var.* portrait only, it would seem, when this portrait had been in use for some time. One identity links Arcadius' portraits II *var.* and III in the B (c) reverse, both showing the spelling **ARCAPIVS**, so presumably both portraits were in use for him simultaneously. But after Eugenius' accession the die-sinkers responsible for portraits I and II (including the shortlived II *var.*) seem to have worked mainly for him and to some extent for Theodosius in connexion with his B (b) reverses, while Arcadius (as **ARCAPIVS**) shares largely with Eugenius in his main issue which combines portrait III with the B (c) reverse. This combination, being by far the most common for Eugenius, probably outlasted the others, and I think the evidence given above allows one to infer that Arcadius was associated to the end in the coinage of Eugenius at Treveri.

MEDIOLANUM.

Of the **VIRTVS ROMANORVM** *siliquae* struck by Eugenius between his arrival at Milan in the spring of 393 and his death in the autumn of 394, I have 24 with his own obverse, 14 with that of Theodosius, 4 with that of Arcadius—mostly in the form of casts kindly supplied me from many museums. Needless

to say, the coins of Arcadius must be carefully distinguished from the later issue with similar type and mint-mark struck by Honorius in his own and his elder brother's names. In the latter the little Victory's dress is represented as billowing out behind like a cloud.

We have no complications to baffle us here. The issue is purely Eugenian and there is no need to write "Eugenian". If part of it were Theodosian we should find coins either—if pre-Eugenian—of Valentinian II, or—if post-Eugenian—of Honorius. The distribution of coins between Theodosius and Arcadius is here understandable. The identities of Eugenius are with Theodosius, though they will no doubt be found, but more rarely, with Arcadius, who shares identities with his father in one of the Eugenian varieties, and has one specimen of each of two others. It is noticeable that Honorius, who was now Augustus, is ignored.

Among these twenty-four coins of Eugenius no less than four varieties, i.e. varying combinations of the usual *differentiae*, are represented. In each the spear is formed by a series of dots. The general type is as described for Treveri and I will mention only the combinations of the *differentiae*, illustrating, where possible, identities linking Theodosius with Eugenius.

1. Dress not over arm—"flower-bell" Victory—flap over l. shoulder.

Eugenius 2; Theodosius 1; Arcadius 1. [Pl. III. 8, 15 (identity), 14.]

2. Dress not over arm—"acute-angle", Victory but with fuller indication of dress—no flap.

Eugenius 2; Theodosius 2. [Pl. III. 9, 16 (identity).]

3. Dress over arm—"acute-angle" Victory—flap.

Eugenius 18; Theodosius 9; Arcadius 2. [Pl. III. 10, 17 (identity), 13.]

The two identities of Arcadius with his father are in this variety. I have two identities linking Theodosius with Eugenius.

4. Dress over arm—"flower-bell" Victory—flap.

Eugenius 3; Theodosius 1; Arcadius 1. I have as yet found no identity in this variety, which is well illustrated in Münzhandlung Basel Cat., lot 2077 (March 18, 1936).

Mediolanum, even more emphatically than Treveri, bears witness to the advances made by Eugenius to Theodosius in his coinage.

I have given the evidence as I read it of about 250 *siliquae* of Treveri, and 42 of Mediolanum. I am diffident as to the correctness of my interpretations of it, and I have pointed out my difficulties. But the generosity of the editors in the matter of illustrations renders an independent judgement possible to any one interested.

J. W. E. PEARCE.

II.

THE COINAGE OF HENRY VI RESTORED: NOTES ON THE LONDON MINT.

SEE PLATES IV-V.

FROM the point of view of numismatics the importance of Henry VI's second reign lies not in itself but in the light it throws on the coinage of Edward IV. Although the work of Mr. Lawrence and others has shown the basic order of the initial marks on Edward's coins, a detailed classification has up to now been impossible.¹ This was due in the first place to lack of documents other than the coins themselves, and in the second place to the apparent illogicality of the system of differentiating marks which abound on coins of this century. In so wide a period as the nineteen years from 1464 to 1483, it was impossible to decide which of the numerous differentiae on the coins were to be taken as moneyer's marks and which as privy marks, that is to say, as three-monthly marks. No evidence existed by which individual initial marks could be precisely dated. There is, however, one period in these nineteen years the coins of which can be recognized with absolute certainty, that is the seven months of Henry's restoration. All the coins bear Henry's name, though in almost every other respect they resemble the coins of Edward IV. There

¹ For the reign in general see: - L. A. Lawrence, *N.C.*, 1891, pp. 180-197; *B.N.J.*, 1911, pp. 151-158; F. A. Walters, *N.C.*, 1910, pp. 117-145; R. Carlyon Britton, *B.N.J.*, 1923-4, pp. 125-132.

can be no doubt that the same engravers and the same mint staff were responsible for the manufacture of both series, even though we know that the senior officials of the mint were changed.² At London and at Bristol we find the same reverse dies used by Edward and Henry.³ The coins of Henry VI restored should therefore provide a clue to the coins of Edward IV. In the first place it should be possible to determine exactly which coins of Edward were struck before and which after the restoration, and this would give one fixed date in the middle of the reign. Secondly, there is more hope of recovering the system underlying the mint-marks in a seven-month period such as this, than in the wider and more chaotic field of Edward's reign. The conclusions drawn for the shorter period, if not directly applicable to the larger, should at least indicate the kind of system to be looked for there. The objects of this paper are therefore to prove, if it can be done, at what precise point the coinage of Edward IV was interrupted by the restoration of Henry VI, and to elucidate the intended meaning of the initial and other marks in the seven months of Henry's second reign.

In October 1470, nearly ten years after Edward had come to the throne, Warwick the Kingmaker raised a rebellion and deposed the king. Edward, taken unawares, fled. Henry VI, who since his capture by Edward had been kept a prisoner in the Tower, was restored to the throne. He was old and physically

² Ruding, 3rd edition, vol. i, p. 279; H. Symonds, *N.C.*, 1926, pp. 103-104.

³ See Plate V.

broken, and was now if ever incompetent to be a king. In April 1471, after seven months, Edward returned to England, collected an army and marched on London. Warwick was defeated at Barnet; Henry fell into Edward's hands and was promptly murdered, after which interlude Edward continued to reign for another ten years.⁴ During the seven months of the restoration, a fairly extensive coinage was issued not only at London, but also at Bristol and York, consisting for the most part of angels and groats.

It will be convenient at this point to give a list of the mint-marks used with the various denominations both before and after the restoration. They are given in their chronological order, as far as that is known.

<i>Ryals.</i>	<i>Early Angels.</i>	<i>Groats.</i>
Rose	Rose	Rose
Rose with Sun		Rose with Sun
Sun		Sun
Sun with Crown		Sun with Crown
Crown	Crown	Crown
		Crown with Sun
Cross Fitchée		Cross Fitchée
	<i>Later Angels.</i>	
	Short Cross Fitchée	Short Cross Fitchée
	Annulet	Small Annulet
		Large Annulet
		Annulet and Trefoil
	Annulet and Pellet	Annulet and Pellet
	⌘ + etc.	⌘ + etc.
	Cinquefoil	Cinquefoil

It will be seen from the initial marks that the three scarce early angels belong to the period of the ryals.

⁴ For the history of the period see Walters, *op. cit.* pp. 117-118.

The short cross fitchée is the earliest mark on Edward's angels after the ryal had been replaced by the angel as the standard gold coin of the realm.

It is at present the accepted opinion that the Edward angels with the short cross fitchée initial mark were struck before the restoration, because there must have been coins in existence to provide the model on which the angels of Henry were based.⁵ It is thought that Henry's angels began to be struck too soon after his return to give time for a new type to be designed. This view is open to the gravest doubt. A study of the details of the short cross fitchée angels will show that they are precisely like the earliest angels with the annulet initial mark, and though they bear an extreme resemblance to some of the Henry coins, they are quite unlike others. I think it can be proved that those to which they bear resemblance come at the end of the Henry series, and those from which they differ at the beginning. If so, the angels of Henry must be placed not after but before the short cross fitchée coins, and it was Henry, not Edward, who popularized the angel at the expense of the ryal.

The earliest angels of Edward IV were issued in accordance with the indenture of 1465, which ordered the new gold for the already existing light silver coinage. They were intended to replace the denomination of the noble, which had been worth 6s. 8d., but with the increased value of gold had come to be worth 8s. 6d. These angels are, however, extremely rare. Only two types have survived, each known from few examples or a single specimen. The only two varieties

⁵ Lawrence, *N.C.*, 1891, p. 185; *B.N.J.*, 1911, p. 155.

which are published agree in the large size of the flan,⁶ the position of St. Michael well within the inner circle, and the presence of rays at the mast-head on the reverse. Though the legends differ in detail, both agree in reading on the reverse two *Qs* in the word *QRVQΘM* and the word *RΘDΘMPTOR* in full, spelt with a *P*. The short cross fitchée angels agree with these in no single detail. They are on a smaller flan, St. Michael is placed so that his right wing breaks the inner circle, and there are no sun's rays at the mast-head. The reverse reads *QRVSΘ* and *RΘDΘTOR*. There is no obvious reason why an acceptable type should have been altered almost before it had had a trial to one in which the figure of the angel fits uncomfortably within its frame, and in which the reverse legend contains two palpable spelling mistakes.

On the other hand those angels of Henry which differ most from the short cross fitchée type do exhibit certain elements more closely related to the earliest angels. Though the flan is smaller and the sun's rays are absent, the figure of St. Michael attempts to fit within its smaller circle, and one coin of this type reads *RΘDΘMTOR* with an *Ω*. There are certainly radical changes, but they are just such changes as one would expect when a new coinage was ordered in a hurry for a new king. The great variety in the abbreviation of the legends is such as normally occurs before a new type has settled down to one tradition. The dies for these particular angels seem to have been made from the same punches, where

⁶ A third variety in Lord Ellesmere's collection will shortly be published by Mr. C. E. Blunt in the *B.N.J.*

possible, as were used for the half-nobles of Edward IV. Notably the prow and the poop of the ship on the reverse were made from the same punches as on the previous ship, and it may be that the need for using these punches determined the smaller module of the coins, which are of the same width as the half-nobles of Edward. Such portions of the design as could not be produced by old punches were engraved by hand, the most obvious instance being the body of the dragon. It was in such portions of the design therefore as this that variations were likely to occur. The dragon's body on the short cross fitchée coins is engraved in the same manner as on some of the annulet coins. It bears no resemblance to the dragon's body as drawn on the earlier Henry angels, as it would, had it been the model from which they were taken.

Another argument for thinking that the angel in its regular form was introduced by Henry VI is to be found in the lettering. It is well known that the silver coins of Henry's restoration use an R scarcely distinguishable from a B (**B**). It is also known that this letter was first introduced under Edward IV as early as the crown initial mark. On these coins it occurs on both gold and silver. On the gold coins of Henry's restoration, however, it occurs only on two known obverse dies and on no known reverse dies. These two obverse dies are precisely those which we have already described as least resembling the short cross fitchée coins. On the short cross fitchée angels the Rs are normal (**R**). It is inconceivable that one issue with the normal R should be sandwiched between two, each with this absurd and characteristic letter. If on the other hand the short cross fitchée coins come after the Henry

angels, then the lettering is only what one would expect.

A similar argument can be drawn from the silver. It is stated by Brooke⁷ that it is impossible to distinguish precisely the silver coins of Edward struck before and after the restoration, because each type throughout the reign is linked to its predecessor and to its successor by mules. I am unable to find confirmation of this statement. So far as I know, no mule has occurred between the long and the short cross fitchée. In this period two forms of the letter I are used: the earlier has a plain top and bottom (I), the later has a serrated top and bottom (X). On the long cross fitchée coins both types are used, though the later serrated type occurs now for the first time. On the short cross fitchée coins only the later type occurs. On the earlier coins of Henry's restoration both forms occur; on the later coins only the late form. The only possible point then at which the restoration coins can come is between the long and the short cross fitchée. The evidence of the silver therefore agrees precisely with that of the gold.

Apart from the evidence of the coins themselves, there are historical reasons for thinking it likely that Henry would wish to introduce a new coin of the value of 6s. 8d. Henry's restoration was meant to be a return to the old order. In Henry's first reign the standard coin of the realm had been the noble of 6s. 8d. One of the more obvious changes of Edward had been the forced supersession of the 6s. 8d. pieces by 10s. pieces. One of the more obvious ways of returning to the old

⁷ G. C. Brooke; *English Coins*, p. 151.

order was to replace the 10s. pieces by revived 6s. 8d. pieces. Henry was powerless to change back the value of gold, which had risen since his first reign. The next best thing therefore to reissuing the old noble was to provide a new coin having the same currency value as a noble, though it would, of course, be a lighter coin. Edward had as a matter of fact provided the model for this in the angel, but in order to popularize his 10s. piece he had abstained from issuing it in quantity. As soon as Henry began to issue it in quantity, the innate conservatism of the nation was roused, and the coin was welcomed back. The 10s. piece was not restored till half a century later.

It is then no longer necessary to put first in the series of Henry angels those which bear the closest resemblance to the short cross fitchée angels of Edward. In actual fact the order of the Henry angels can be proved from the die links almost without a gap. For this purpose twenty-six different coins, involving eleven obverse and eighteen reverse dies have been studied.

The order of the dies is given partly by the die combinations, and partly by the similarity of the dies.⁸ Of the obverses, dies A and B are related by the use of the R which resembles a B. Dies C and D are related by having no initial mark and the word FRATROIA. Dies E and F are related by having the Restoration cross initial mark at the end of the legend. Dies G and H are related, partly because they are the only two known combined with the lys-marked reverse,

⁸ See Plate IV.

and partly because they are the only two obverses reading DGI which have no initial mark. Dies I, J, and K are related by reading hENRIQV' and having massed trefoils at the end of the legend. Of the reverses, dies a, b, c, and d are related by having no bowsprit on the ship, and having the cross pattée initial mark. Dies e, f, g, and h are related by reading RQDET and having the Restoration cross initial mark. Dies i, j, k, and l are related by having a Restoration cross at the end of the legend, and reading RQDGTOR. Die m with the lys mint-mark stands alone, but is apparently more akin to the later than to the earlier coins. The remaining reverse dies, n-r, are related by possessing no initial mark, and are grouped according to the spelling of the word 'Crux'.

The combinations of mint-marks which occur are as follows:—

<i>Obv.</i>	<i>Rev.</i>
No initial mark	Cross pattée
No initial mark	Restoration cross
Restoration cross	Restoration cross
{ No initial mark	Lys
{ No initial mark	No initial mark
Restoration cross	No initial mark

To judge from the coins this must have been the order in which the marks were issued. Two groups, however, call for special comment. The only reverse die with the lys mint-mark (m) is known combined with two obverses, dies G and H. Die H is known in no other combination, die G is known with only one other reverse (n) which itself is known in no other combination. These two obverse and two reverse dies

appear therefore to stand in a group by themselves. They have also certain idiosyncrasies which distinguish them from the other dies. Die G is the only known die with saltire stops. Die H combines the apparently early spelling *FRTRQIA*, with the apparently late spelling *DEI*. Die m has the otherwise unknown spelling *QRVO*, and reads *NO*, elsewhere only known on die a. Die n is the only seemingly late die reading *RADGQNTOR* in full, in which respect it resembles die m. It therefore seems probable that these two pairs of dies form a sub-group, which may or may not have been issued concurrently with one of the other groups. The suggestion that the lys marked coins were struck at York is not justifiable. Although we know gold to have been struck there, and although the lys was the initial mark of York during this period, the link of the lys marked coins with others bearing no specific mint sign makes it certain that the coins belong to London. One must still look for York angels with an *G* in the waves. The second group which calls for comment is that on which there is no initial mark. There are two angels of this description. One, (*Gn*), has already been dealt with; the other, (*Bo*), combines one of the two dies on which the *R* is like a *B* with an apparently late reverse. This particular obverse must from the lettering have been one of the first made, but it appears to have been used sparingly with the earliest reverses. The die is, however, shockingly drawn. The angel's left wing offends against the laws even of an angel's structure, and the body of the dragon is strangely amorphous. It was probably the artist's first attempt at the composition, and was laid aside, to begin with, for purely aesthetic reasons.

Subsequently familiarity or economy bred contempt, and the die was used.

Even supposing the marks have been put in the right order, it is by no means obvious what meaning these marks were intended to convey. It is normally held that the initial marks were part of a system of privy marks put upon coins in order that they might be recognizable by their makers at intervals of three months at the trials of the pyx. For certain periods this is undoubtedly true; during the reign of Edward IV it is by no means so certain. The record has survived of a trial of the pyx during this reign which on this assumption is inexplicable.⁹ In December 1475 a trial was held to test the weight and purity of the coins which had been issued between the beginning of the second reign of Edward and the month of the trial, altogether a period of four years and seven months. Thirty-six bags of sample coins were taken to be tested, and thirty-four actually were tested. If these bags were to represent three-monthly divisions, one would expect fourteen or fifteen bags. If they were to represent monthly output, one would expect, allowing for the months in which money was not coined, forty-two bags. In fact, it is impossible to apportion the bags precisely to any duration of time, though the average must have been between one and two months. It is reasonable to suppose that all the coins within one bag bore the same privy mark. If that is so, the period of the privy mark can hardly have been a strict affair of time-tables.

Precisely the same conclusions appear to me to be

⁹ Symonds; *N.C.*, 1926, pp. 107-110.

suggested by the die sequences of the Henry angels. The period of Henry's reign was from October 1470 to April 1471, a period of between six and seven months. Although the only indenture for the coinage of this period is dated March 7, that is towards the end of the reign, the coins must have been struck almost from the beginning. One would therefore expect two or possibly three privy marks. In actual fact, as we have seen, there are six combinations of initial marks, of which the second is far the commonest. One may say that the only coins struck in the first three months were the few with the cross-pattée mint-mark, and that the vast majority were coined in the second three months, that is in the early part of 1471. Though this is possible, it seems most improbable. The first three-monthly period must start from the beginning of the new reign. Especially is this so since we know that new responsible officers were appointed to the mint at the restoration.¹⁰ Or again, on the theory that it is the reverse die which dates a coin, the series might be divided into two three-monthly groups with a few stray early pieces. The cross pattée and the lys would not be taken as constituting full periods, the Restoration cross and the reverse without mint-mark would be the two successive terms. But it seems hard to leave the obverse initial mark completely out of account, and it is still harder or even impossible to find the necessary privy mark in any other feature of coins than the initial mark.

The natural assumption from the coins themselves is that the initial marks have no definite time meaning,

¹⁰ See note 2.

but that changes took place gradually. No doubt records were kept of which die combinations were used at particular periods. To judge from the die combinations, coins with the Restoration cross and the cross pattée mint-marks were being struck at more or less the same time. There are no obverse dies used only with cross pattée reverses.

We have already seen that the sub-group of coins with the lys initial mark and no initial mark may have been struck contemporaneously with one of the other groups, probably the group with the Restoration cross on both sides.

It is a notable fact that the dies were so designed as to be distinguishable at a glance to any one who knew what to look for, in general the spelling and stopping of the first and last words. No two obverse dies and only two reverse dies (J and K) have identical legends. This applies also to Edward IV, except in the case of one initial mark (+). Since these differences from die to die were so unmistakable, there was no need for a general mark to distinguish the coins of a single moneyer or period. A record of the actual dies used would have been simpler and more accurate. My conclusions then are that the initial mark was to serve as no more than a general indication of the date of a particular die, and that the other varieties upon the dies cannot be reduced to a chronological system, but were put there merely to distinguish one die from another. Only in the rarest cases was it intended that dies should be indistinguishable. These conclusions apply solely to the gold coinage.

To apply the same method to the silver coins as has been applied to the gold is impossible because the

number of marks and dies is so much larger. It is impossible to find amongst the surviving coins a proportionate number of die links. Such as there are, however, lead to definite conclusions. The groats of Henry VI have on the obverse one of two initial marks, the cross pattée or the Restoration cross.¹¹ On the reverse there occur four marks, the cross pattée, the Restoration cross, the short cross fitchée, and the lys. There is sometimes difficulty in distinguishing the short cross fitchée and the Restoration cross. The short cross fitchée has the lower arm of the cross definitely wedge-shaped, whereas the Restoration cross has all arms of the same uneven shape. Whatever is the meaning intended by the two marks, and whether their makers distinguished them or not, there is no doubt that they are different.

In addition to the two obverse initial marks there is a further subdivision of the obverses. On some coins of each initial mark the cusps of the tressure above the crown are decorated with trefoils; on others they are not. This difference is not due to chance since it is accompanied by concomitant variations. All coins with the trefoils missing read *hENRIQ'*; most coins with trefoils present read *hENRIQV'*. All coins with the cross pattée on the obverse, and no trefoils above the crown have saltire stops. The similar coins with the Restoration cross have mostly trefoil stops. Correspondingly, coins with the cross pattée on the obverse and the trefoils above the crown have generally trefoil stops, while the similar coins with the Restoration cross have with only one exception saltire stops. This is clearer in a diagram than in words.

¹¹ See Plate V.

<i>Cross pattée.</i>	<i>Spelling.</i>	<i>Stop.</i>	<i>Spelling.</i>	<i>Stop.</i>	<i>Restoration cross.</i>
Without trefoil	hENRIQ	×	hENRIQ hENRIQ	∴ ×	Without trefoil
With trefoil	hENRIQ hENRIQV hENRIQV	∴ ∴ ×	hENRIQ hENRIQV hENRIQV	×	With trefoil
				×	
				∴	

The system does not work out entirely consistently, but it is too regular to be merely casual. There is one anomalous die (o) on which only one trefoil above the crown is present.

Each obverse initial mark is known combined with each reverse initial mark, though each subdivision is not. This also will be more easily seen in diagram.

<i>Mint-mark.</i>	<i>Cross pattée.</i>		<i>Restoration Cross.</i>	
	<i>Without trefoils.</i>	<i>With trefoils.</i>	<i>Without trefoils.</i>	<i>With trefoils.</i>
Lys	×		×	
Short-cross fitchée	×	×	×	×
Restoration cross	×	×	×	×
Cross pattée	×	×	×	×

Judging from the evidence of the gold, one would expect all coins with cross pattée obverses to have occurred before all coins with the Restoration cross obverses, whatever the reverse mint-mark; but such die links as I have been able to find, show, I think conclusively, that coins with both obverse initial marks

were being issued simultaneously. In a number of instances (coins A 1 and G 1; D 11, F 11 and I 11) the same reverse die is known with different obverses, one having the Restoration cross and another having the cross pattée. Normally such coins would be regarded as mules, linking two successive marks. My point is that in this series such coins cannot be regarded as mules because the reverse dies in question can from the lettering be proved to be both the earliest and the latest of the reign. One of these reverses (Die 1) found with both obverses has the lys mint-mark, the other (Die 11) has the cross pattée. All coins with the lys mark use the simple form of I (X), which has already been shown to be early. All coins with the cross pattée mark use the serrated form of I (X), which has already been shown to be later. It is impossible that both these reverse mint-marks can be transitional between two successive obverse marks. The life of reverse dies is notoriously short. It is therefore difficult to avoid the conclusion that the obverse mint-marks were being issued simultaneously. Equally it is probable that coins both with and without trefoils above the crown were being issued simultaneously. One reverse die, again Die 11, is known with two different obverses, on one of which the trefoils are present, and on the other of which they are absent. It is worth remarking that one obverse die (A) is known combined with all four reverse initial marks. But since the life of an obverse die is relatively long, this is by no means inconsistent with the view that the four reverse mint-marks are successive. This is supported by the wear and tear of the obverse die in question.

The order of the reverse mint-marks can to some extent be established. The lettering gives us the lys as the first mark. On the short cross fitchée both forms of I are used, and this mark must therefore come second in order. Only the late form of I is used with the Restoration cross and the cross pattée marks. We are therefore left to determine the order of these from other sources. This is probably given by the existence of a mule having on the obverse the short cross fitchée mark and the name of Edward, and on the reverse the Restoration cross, which is not properly a mark of Edward's at all. This actual reverse die (no. 29) is known on a coin of Henry VI. (I have to thank Mr. Lawrence for this discovery.) It is therefore practically certain that the order of the last two marks is cross pattée followed by Restoration cross. Presumably the reverses were used in the same order whatever the obverse mint-mark, though in each case the "true" coin may have come last. The order is therefore, lys, short cross fitchée, cross pattée, Restoration cross.

These same two forms of I occur also on the obverses; but here it is impossible to base any argument on them, for we have already seen that the two classes were contemporary. The obverses on which the early form of I occurs are dies H, M, and S, all of which have the Restoration cross initial mark. These dies were presumably made earlier than the rest.

Even if the reverse marks are successive, it is obviously impossible to fit them into a simple time sequence involving three-monthly periods. Four marks cannot be made to fit seven months. It is impossible to hold that the four marks were monthly

marks since four months is an insufficient period to account for the coinage which has survived. The natural explanation is that the reverse initial marks, though changed at intervals, were not changed at regular intervals. On the average each mark must have had an approximate duration of a month and a half, exactly the same conclusion as was reached for Edward's Trial of the Pyx. We are still, however, left with the two obverse initial marks, and their subdivisions; four classes in all. Neither the marks, nor their subdivisions, as we have seen, have a time significance. The only possible alternative is that they refer instead to departments or workshops in the mint. Perhaps the two obverse marks with their two subdivisions were intended to show in which of four departments at the mint the coin was made. Individual moneyers must have continued to mark their coins even after they had ceased to put their names on them, and such distinctions as these may well have been their marks.

To sum up, my view is that on the silver the obverse initial mark says who made the coin, and the reverse initial mark says when he made it.

If this reasoning be correct, it follows that there is no exact parallelism between the gold and the silver. Whereas the same three marks were employed during the same period on both metals, they had not an identical meaning on each. The cross pattée on the angels was only used for a short time, and then only on the reverse. It was presumably intended to distinguish the earlier from the later dies. On the obverse of the silver the same mark was intended to mean the workshop in the mint where the coin was

made. On the reverse it again referred to the time when the coin was made, but in this case it came in the middle and not at the beginning of the series. The lys which meant the earliest coins on the silver came in the middle of the gold. This inconsistency is not so surprising considering the relative proportions of gold and silver which were coined. In the gold series so few dies were used and such as were lasted so long that it was not a practical proposition to throw them all away at a given moment, and start afresh with new ones. In the silver, dies had so frequently to be replaced that this was more possible. So carefully are the marks planned and placed that I do not believe this incoherence due to some temporary disorganization of the mint. One need not be surprised if some such minor incongruity between gold and silver were found to exist also during a much wider period. And it is because this can more easily be proved in the limited area of Henry VI's restoration than in the wider field on either side, that I regard the study of this reign as an essential preliminary to a study of the coinage of Edward IV.

The views expressed in this paper differ radically from the published views of Mr. L. A. Lawrence. It is only fair to say that but for the kindness of Mr. Lawrence in giving me the benefit of his knowledge, his experience, his criticism, and his coins, this paper could never have been written. I wish to express my gratitude.

DESCRIPTION OF PLATES.

PLATE IV.

Henry VI Restored, Angels of the London Mint :

Obv. dies : A, B, C, D, F, G, H, I.

Rev. dies : a, c, e, f, h, i, l, m, n, o, q, r.

PLATE V.

Henry VI Restored, Groats of the London Mint :

Obv. dies : C (Cl. I a), D (Cl. I b), N (Cl. II a), T (Cl. II b).

Rev. dies : 1 (m.m. Lys), 20 (m.m. Short Cross Fitchée), 6 (m.m. Cross Pattée), 7 a (m.m. Restoration Cross).

Die links : Henry VI, London Groat (m.m. Restoration Cross) using same *rev.* die as Edward IV Groat (m.m. *obv.* Short Cross Fitchée). Henry VI Bristol Groat (m.m. *obv.* Trefoil, *rev.* Rose) using same *rev.* die as Edward IV Groat (m.m. *obv.* Rose).

Half Groats : A 1, C 3.

Penny : B 2.

Halfpenny.

LISTS.

All coins are in the British Museum unless otherwise stated.

HENRY VI ANGELS: LONDON MINT.

<i>Die.</i>	<i>Obverse dies.</i>	<i>Form of R</i>	<i>Mint-mark.</i>
A	..HENRICO:DI:GRT*:RAX:TNGL*:\$.FRTRND†:	⌘	None
B	..HENRICO:DI GRT*:RAX:TNGL*:\$.FRTRND†:	⌘	"
C	..HENRICOVS:DI:GRT*:RAX:TNGL*:\$.FRTRND†:	⌘	"
D	HENRICOVS:DI GRT*:RAX:TNGL*:\$.FRTRND†	⌘	"
E	HENRICOVS:DI:GRT*:RAX:TNGL*:\$.FRTRND††	⌘	Restoration Cross
F	..HENRICOVS:DI:GRT*:RAX:TNGL*:\$.FRTRND††	⌘	"
G	HENRICOVS:DEI*GRT*:RAX TNGL*:\$.FRTRND†	⌘	None
H	..HENRICO:DEI:GRT*:RAX:TNGL*:\$.FRTRND†:	⌘	"
I	†HENRICOV*:DEI GRT* RAX:TNGL*:\$.FRTRND†:	⌘	Restoration Cross
J	†HENRICOV*:DI:GRT* RAX:TNGL*:\$.FRTRND†	⌘	"
K	†HENRICOV DEI:GRT*:RAX TNGL*:\$.FRTRND†:	⌘	"
BRISTOL MINT.			
A	..HENRICOVS:DEI:GRT*:RAX TNGL*:\$.FRTRND†:	⌘	None
B	..HENRICOV*:DI:GRT*:RAX:TNGL*:\$.FRTRND:DNST†:	⌘	"

Die.	Reverse dies.	Bousprit.	Mint-mark.
a	*PER ORVSE'::TVT' STLVT NO'::XPC' RAEØMTOR	<input type="checkbox"/>	Cross Pattée
b	*PER ORVSE' TVT' STLVT' NOS:XPC'::RAEØTØR	<input type="checkbox"/>	"
c	*PER::ORVSE TVT'::STLVT::NOS:XPC'::RAEØTØR	<input type="checkbox"/>	"
d	*PER ORVSE'. TVT' STLVT' NOS:XPC'::RAEØTØR	<input type="checkbox"/>	"
e	*PER::/.ORVSE' TVT' STLVT NOS XPC RAEØT'.	<input checked="" type="checkbox"/>	Restoration Cross
f	*PER /..ORVSE TVT' STLVT::NOS:XPC'::RAEØT'.	<input checked="" type="checkbox"/>	"
g	*PER /...ORVSE TVT STLVT NOS::XPC' RAEØT'.	<input checked="" type="checkbox"/>	"
h	*PER /ORVSE'.TVT'::STLVT::NOS:XPC::RAEØT'.	<input checked="" type="checkbox"/>	"
i	PER ORVSE'::TVT'::STLVT::NOS:XPC' RAEØTØR✦	<input type="checkbox"/>	"
j	PER ORVSE'::TVT'::STLVT::NOS:XPC'::RAEØTØR✦	<input type="checkbox"/>	"
k	PER ORVSE'::TVT'::STLVT::NOS:XPC'::RAEØTØR✦	<input type="checkbox"/>	"
l	PER::ORVSE'::TVT'::STLVT::NOS:XPC'::RAEØTØR✦	<input type="checkbox"/>	"
m	✦PER ORV /Q::TVT' STLVT' NO' XPC' RAEØM::TØR	<input checked="" type="checkbox"/>	"
n	PER OR /VQØ'::TVT' STLVT::NOS XPC' RAEØMTØR::	<input checked="" type="checkbox"/>	Lys
o	PER OR /VQØ'::TVT'::STLVT::NOS:XPC'::RAEØTØR	<input checked="" type="checkbox"/>	None
p	PER OR /VQØ'::TVT'::STLVT::NOS:XPC'::RAEØTØR	<input checked="" type="checkbox"/>	"
q	PER::OR /VQØ'::TVT'::STLVT::NOS XPC'::RAEØTØ	<input checked="" type="checkbox"/>	"
r	PER Q /RVQØ' TVT' STLVT::NOS:XPC'::RAEØTØ::	<input checked="" type="checkbox"/>	"
BRISTOL MINT.			
a	✦PER /..ORVSE' TVT' STLVT NOS::XPC' RAEØT'.	<input checked="" type="checkbox"/>	Restoration Cross
b	✦PER /ORVSE'::TVT' STLVT::NOS:XPC'::RAEØMT'.	<input checked="" type="checkbox"/>	"
c	PER OR /VQØ'::TVT'::STLVT' NOS::XPC' RAEØT'::TØR	<input checked="" type="checkbox"/>	None

For combinations of dies see p. 50.

HENRY VI HALF-ANGELS: LONDON MINT.

<i>Die</i>	<i>Obverse dies.</i>	<i>Mint-mark.</i>
A	hENRIQ̄:DEI GR̄T:R̄EX:TNGL'::S:FR†	None
B	hENRIQ̄:DI GR̄T' R̄EX:TNGL S FR†	„
C	hENRIQ̄V:DI GR̄T':R̄EX:TNGL'::S:FR†	„

<i>Die.</i>	<i>Reverse dies.</i>	<i>Mint-mark.</i>
a	O QRV::X:TV̄Θ:SP̄ES V::NIQT	Lys
b	* O::/::Q̄RVX:TV̄Θ:SP̄ES:V:NIQT	Cross Pattée
c	✦+O+/*Q̄RVX*TV̄Θ*SP̄EQ̄ VNIQT	Restoration Cross

COMBINATIONS OF DIES.

Rev. dies.

	a	b	c
A	x	..	..
B	..	x	x
C	..	..	x

Obv. dies.

Bc: R. C. Lockett.

Cc: V. J. E. Ryan.

HENRY VI ANGELS. COMBINATIONS OF DIES.

Rev. dies.

<i>Obv. dies</i>	Cross Patée				Restoration Cross								Lys	No mint-mark					
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	
{ A B C D } No mint-mark	x	x	.	.	x	.	x	.	.	.	.	.	.	.	.	.	.	.
	.	.	x	.	.	x	x	.	.	.	.	.	.	.	.	.	.	.
	
	
{ E F } Restoration Cross	
	
{ G H } No mint-mark	
	
{ I J K } Restoration Cross	
	
	
	

o: R. C. Lockett.
 : R. C. Lockett.
 l: Ashmolean Museum.
 : Baldwin, 1936.
 : R. C. Lockett.
 : Magdalen College, Oxford.
 : Walters Sale, 1913, 427.
 Ce: Bruun Sale, 428.
 Fo: R. C. Lockett.
 Gm: *B.N.J.*, xvii, p. 129, no 2.
 Gn: *B.N.J.*, xvii, p. 129, no. 3.
 Ji: Ashmolean Museum.
 Kr.: R. C. Lockett.

BRISTOL MINT.

Rev. dies.

Obv. dies.

	a	b	c
A	x	.	.
B	.	x	.

Bb: V. J. E. Ryan.

HENRY VI RESTORATION GROATS: LONDON MINT.

<i>Die</i>	<i>Obverse dies.</i>	<i>Lys</i>	<i>Short Cross Fritchee</i>	<i>Restoration Cross</i>	<i>Cross Pattée</i>
Class I a. Obverse mint-mark: Cross Pattée.					
Two top cusps of tressure without ornaments.					
A	*HENRIQ' DI* GRAT*REX*TNGL* \int * FRTHQ	x	x	x	x
B	*HENRIQ' DI' GRAT*REX*TNGL* \int FRTHQ	..	x	..	x
C	*HENRIQ'* DI* GRAT'*REX*TNGL* \int FRTHQ	..	..	..	x
Class I b. Obverse mint-mark: Cross Pattée.					
All cusps of tressure with ornaments.					
D	*HENRIQ'..DI GRAT..REX..TNGL.. \int ..FRTHQ..	..	x	x	x
E	*HENRIQ'..DI GRAT..REX..TNGL.. \int ..FRTHQ..	..	..	x	..
F	*HENRIQ'* DI GRAT'*REX*TNGL* \int * FRTHQ	..	..	x	x

HENRY VI RESTORATION GROATS: LONDON MINT.

<i>Die.</i>	<i>M.m.</i>	<i>Reverse dies.</i>	<i>Form of I</i>	<i>Where else used.</i>
		Class I a. Used with obverse dies, having the cross pattée mint-mark, and two ornaments above the crown missing.		
1	Lys	✠ POSVI/DEVM ꝛ/DIVTOR/Æ' MEVM/	Y	Cl. IIa
2	S. C. F.	✠ POSVI/DEVM ꝛ/DIVTOR/Æ' MEVM/	Y	..
2a	„	✠ POSVI/DEVM?ꝛ/DIVTOR/Æ' MEVM/	Y	..
3	„	✠ POSVI/DEVM*ꝛ/DIVTOR/Æ' MEVM/	X	..
4	R. C.	✠ POSVI/DEVM✠ꝛ/DIVTOR/Æ' MEVM/	X	..
5	C. P.	* POSVI/DEVM*ꝛ/DIVTOR/Æ' MEVM/	X	..
6	„	* POSVI/DEVM*ꝛ/DIVTOR/Æ' MEVM/	X	..
		Class I b. Used with obverse dies, having the cross pattée mint-mark and all cusps decorated with ornaments.		
7	S. C. F.	✠ POSVI/DEVM ꝛ/DIVTOR/Æ' MEVM/	X	..
7a	R. C.	✠ POSVI/DEVM*ꝛ/DIVTOR/Æ' MEVM/	X	..
8	„	✠ POSVI/DEVM*ꝛ/DIVTOR/Æ' MEVM/	X	..
9	„	✠ POSVI/DEVM ꝛ/DIVTOR/Æ' MEVM/	X	..
10	„	✠ POSVI/DEVM✠ꝛ/DIVTOR/Æ' MEVM/	X	..
11	C. P.	* POSVI/DEVM*ꝛ/DIVTOR/Æ' MEVM/	X	Cl. IIa

HENRY VI RESTORATION GROATS: LONDON MINT.

Die.	Obverse dies.	Lys	Short Cross Fitchée	Restoration Cross	Cross Pattée
Class II a. Obverse mint-mark: Restoration Cross. Two top cusps of tressure without ornaments.					
G	✠HENRIC⁹·DI GRT⁹·RAX⁹·TNGL⁹·>·FRTRNC	x	..	..	..
H	✠HENRIC⁹·DI·GRT⁹·RAX⁹·TNGL⁹·> FRTRNC	..	..	x	..
I	✠HENRIC⁹·DI GRT⁹·RAX⁹·TNGL⁹·>·FRTRNC	..	..	..	x
J	✠HENRIC⁹·DI GRT⁹ RAX⁹·TNGL⁹·> FRTRNC.	x	x	..	..
K	✠HENRIC⁹·DI GRT RAX TNGL⁹·>·FRTRNC.	..	..	x	..
L	✠HENRIC⁹·DI GRT⁹ RAX⁹·TNGL⁹·>·FRTRNC	..	x	..	..
M	✠HENRIC⁹·DI·GRT⁹ RAX⁹·TNGL⁹·>·FRTRNC	..	..	x	..
N	✠HENRIC⁹·DI GRT RAX·TNGL⁹ > FRTRNC	..	..	x	..
The following die has only the right-hand top ornament missing.					
O	✠HENRIC⁹·DI GRT⁹ RAX⁹·TNGL⁹·> FRTRNC	x	x	..	..
Class II b. Obverse mint-mark: Restoration Cross. All cusps of tressure with ornaments.					
P	✠HENRIC⁹·DI GRT⁹ RAX⁹·TNGL⁹·>· FRTRNC⁹	..	..	x	..
Q	✠HENRIC⁹·DI GRT⁹·RAX⁹·TNGL⁹·>· FRTRNC	..	x	x	..
R	✠HENRIC⁹·DI GRT RAX⁹·TNGL⁹·>· FRTRNC	..	..	x	..
S	✠HENRIC⁹·DI GRT⁹·RAX⁹·TNGL⁹·>· FRTRNC	..	x	x	..
T	✠HENRIC⁹·DI GRT⁹·RAX⁹·TNGL⁹·>· FRTRNC⁹	..	x	..	..
U	✠HENRIC⁹·DI GRT⁹·RAX⁹·TNGL⁹·>· FRTRNC	..	x	..	..
V	✠HENRIC⁹·DI·GRT⁹·RAX⁹·TNGL⁹·>· FRTRNC	..	..	x	..
W	✠HENRIC⁹·DI GRT⁹ RAX⁹·TNGL⁹·>·FRTRNC	..	..	..	x
Y	✠HENRIC⁹·DI GRT⁹·IT ? R·TNGL⁹·> FRTRNC⁹	..	..	x	..

HENRY VI RESTORATION GROATS: LONDON MINT.

<i>Die.</i>	<i>M.m.</i>	<i>Reverse dies.</i>	<i>Form of I</i>	<i>Where else used</i>
		Class II a. Used with obverse dies having the Restoration cross mint-mark, and two ornaments above the crown missing.		
1	Lys	✠ POSVI/DEVM T/DIVTOR/Æ MÆVM/	Y	Cl. Ia
12	"	✠ POSVI/DEVM T/DIVTOR/Æ MÆVM/	Y	..
13	S. C. F.	✠ POSVI/DEVM? T/DIVTOR/Æ MÆVM/	Y	..
14	"	✠ POSVI/DEVM T/DIVTOR/Æ MÆVM	Y	..
15	R. C.	✠ POSVI/DEVM* T/DIVTOR/Æ MÆVM/	X	..
16	"	✠ POSVI/DEVM* T/DIVTOR/Æ MÆVM/	X	..
17	"	✠ POSVI/DEVM. T/DIVTOR/Æ MÆVM/	X	..
18	"	✠ POSVI/DEVM. T/DIVTOR/Æ MÆVM/	X	..
11	C. P.	* POSVI/DEVM* T/DIVTOR/Æ MÆVM/	X	Cl. Ib
		Similar, but with only one trefoil missing on obverse die.		
19	S. C. F.	✠ POSVI/DEVM. T/DIVTOR/Æ MÆVM/	X	..
		Class II b. Used with obverse dies having the Restoration cross mint-mark and all cusps decorated with ornaments.		
20	S. C. F.	✠ POSVI/DEVM T/DIVTOR/Æ MÆVM/	Y	..
20a	"	✠ POSVI/DEVM T/DIVTOR/Æ MÆVM/	Y	..
21	"	✠ POSVI/DEVM T/DIVTOR/Æ MÆVM/	X	..
22	"	✠ POSVI/DEVM* T/DIVTOR/Æ MÆVM/	X	..
23	"	✠ POSVI/DEVM* T/DIVTOR/Æ MÆVM/	X	..
24	R. C.	✠ POSVI/DEVM* T/DIVTOR/Æ MÆVM/	X	..
25	"	✠ POSVI/DEVM* T/DIVTOR/Æ MÆVM/	X	..
26	"	✠ POSVI/DEVM? T/DIVTOR/Æ MÆVM/	X	..
27	"	✠ POSVI/DEVM T/DIVTOR/Æ MÆVM/	X	..
28	"	✠ POSVI/DEVM T/DIVTOR/Æ MÆVM/	X	Ed. IV
29	"	✠ POSVI/DEVM* T/DIVTOR/Æ MÆVM/	X	1471
30	"	✠ POSVI/DEVM* T/DIVTOR/Æ MÆVM/	X	..

HENRY VI RESTORATION GROATS:

Reverse dies.

Obverse dies.

		Class Ia						Class Ib							
		<i>Lys</i>	<i>S. C. F.</i>		<i>R. C.</i>	<i>C. P.</i>		<i>S. C. F.</i>	<i>R. C.</i>				<i>C. P.</i>		
			1	2		2a	3		4	5	6	7		7a	8	9	10	11
Class Ia Cross Pattée	A	×	×	..	×	×	..	×	..	..	..	..	..	..	..
	B	..	..	×	..	..	×	..	..	..	..	..	..	..	..
	C	..	..	..	..	..	..	×	..	..	..	..	..	..	..
Class Ib Cross Pattée	D	..	..	..	..	..	..	..	×	×	..	..	..	..	×
	E	..	..	..	..	..	..	..	..	..	×	..	..	..	..
	F	..	..	..	..	..	..	..	..	×	..	×	×	×	×
Class II a Restoration Cross	G	×	..	..	..	..	..	..	..	..	..	..	..	..	..
	H	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	I	..	..	..	..	..	..	..	..	..	..	..	..	×	..
	J	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	K	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	L	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	M	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Class II a ? Restoration Cross	N	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	O	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Class II b Restoration Cross	P	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Q	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	R	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	S	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	T	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	U	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	V	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	W	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	X	..	..	..	..	..	..	..	..	..	..	..	..	..	..

A 1: L. A. Lawrence.

A 2: "

A 3: "

A 6: "

B 2a: R. C. Lockett.

D 7a: L. A. Lawrence.

D 11: "

F 7: "

F 9: "

F 10: R. C. Lockett.

COMBINATIONS OF DIES.

Reverse dies (cont.).

[illegible]

H 15: L. A. Lawrence.
I 11: J. Shirley Fox.
J 12: R. C. Lockett.
K 17: L. A. Lawrence.
L 14:

O 19: J. Shirley Fox.
P 28: R. C. Lockett.
Q 20 a: "
S 29: L. A. Lawrence.

<i>Dies.</i>	<i>Obverse dies.</i>	<i>Mint-mark.</i>
A	✠HENRICV'·DI·GRT' REX·TNGL·S	Restoration Cross
B	✠HENRICV' DI GRT' REX TNGL S FRT	"
C	✠HENRICV' DI GRT'·REX TNGL·S·FR	"
D	✠HENRICV' DI GRT'·REX TNGL·S·FR	"
The cusps above the crown are ornamented on dies A and B, but not on dies C and D.		
	<i>Reverse dies.</i>	
1	✠POSVI/DEVRN T/DIVTOR/Æ' MEVRN/	Restoration Cross
2	✠POSVI/DEVRN T/DIVTOR/Æ' MEVRN/	"
3	POSVI/DEVRN T/DIVTOR/Æ' MEVRN/	None
4	POSVI/DEVRN T/DIVTOR/Æ' MEVRN/	"

	<i>Rev.</i>			
	1	2	3	4
A	×	·	·	·
B	·	×	·	·
C	·	·	×	·
D	·	·	·	×

COMBINATIONS
OF DIES.*Obv.*

B2: R. C. Lockett.

HENRY VI RESTORATION PENNY: LONDON MINT.

<i>Dies.</i>	<i>Obverse dies.</i>	<i>Mint-mark.</i> (Form of cross obliterated by h) Restoration Cross Cross Pattée
A	hENRIQ (over + EDWRD) DI GRT REX TNG	
B	✠hENRIQV' DI GRT REX TNG	
C	✠hENRIQ' DI GRT' REX TNG	
1	<i>Reverse dies.</i>	
2	QIVITTS LONDON	None
3	QIVITTS LONDON	"
	QIVITTS LONDON	"

COMBINATIONS OF DIES.	<i>Rev.</i>			A 1: R. C. Lockett. C 3: L. A. Lawrence.
	1	2	3	
	A	B	C	
<i>Obv.</i>	×	
	..	×	..	
	×	

HENRY VI RESTORATION HALFPENNY: LONDON MINT.

Mint-mark: Short Cross Fitchée on *Obverse* only.

Obv. ✠hENRIQV' DI GRT REX

Rev. QIVITTS LONDON

III.

MULTAN: THE HOUSE OF GOLD.¹

THIS contribution is concerned with a group of Indo-Sassanian coins stated by Sir Alexander Cunningham to have been struck by kings of Sind; they bear the effigy of a deity which Cunningham described as the sun-god of Multan. This attribution has held the field for forty years and has been widely accepted. I record some considerations which I submit show that the coins do not belong to Sind and that the deity is not the sun-god of Multan.

In the autumn of A.D. 711, the year of the Muhammadan conquest of Spain, the Arabs appeared before Dewal, a port of the Indus delta region, and by the year 713 the conquest of Sind was complete and Multan had fallen. The tide of invasion reached the extremities of the Islamic empire simultaneously, but while the contact of the Arabs with the culture of the west resulted in the brilliant kingdom of Cordova, the Arab administration of Sind with Multan as a northern outpost remained stagnant, and it was a subsequent impetus by another race three centuries later and from another direction which resulted in the Muslim conquest of India. The history of Sind called the Chachnāma terms Multan "a prop of the kingdom of Sind and Hind"; it was always the capital of the south-west Punjab. The Rai dynasty of Sind, which

¹ A paper read at the International Numismatic Congress, London, 1936.

is said to have reigned 137 years, was subverted by the Brahman Chach whose accession is placed about the year 642. Chach left a deputy in the capital Alor and advanced with an army towards Multan. When the fort of Multan was taken, Chach went to an idol temple which stood in a retired and solitary place, prostrated himself before the idol, offered sacrifices and then proceeded on his expedition. At this time (about A.D. 644) the Chinese pilgrim Yuan Chwang came to the Mou-lo-san-pu-lu country. Amongst the temples of other religions was the magnificent fane of the Sun-deva; the image was of gold and the kings and nobles of all India made offerings to it. The name of the country has been restored as Mūlasthānapura and identified with Multan. Mr. Watters says that this is an impossible restoration.² The name literally means the city of the foundation place and signifies the city of the Supreme Spirit, usually Śiva. When Multan was captured by the Arabs, their leader Muhammad ibn Kāsim went to the temple where he found an idol made of gold with two eyes of red rubies in its head. The keeper of the idol said, "O just commander, this is only an idol which has been made by Jaswīn, the king of Multan, who has buried his treasure here". The treasure was contained in forty large copper jars; this great hoard together with jewels, pearls, and other plunder was sent off in boats to Dewal. The quantity of gold seems to vary with the translation. Major H. G. Raverty in his *Mihrān of Sind* reckons that by the lowest computation the treasure amounted to the enormous weight of 26,400 lb. of gold. The

² On Yuan Chwang, by T. Watters, 1904-1905, II, p. 254.

hoarding of temple treasure in a vault or receptacle underneath the idol was not peculiar to Multan, but the circumstances attending the discovery by Muhammad ibn Kāsim of this particular deposit and its immensity were such that Multan was called by the early Arab historians and geographers "the *Farkh-i-Bait-uz-Zahab*, the Temple of the House or Vault of Gold". The references are conveniently summarized by Major Raverty, *J.A.S.B.*, 1892, pp. 186 f. The best-known account is that of the celebrated al-Birūnī who, writing about A.D. 1028, records that there was a famous sun temple at Multan styled Āditya; in another place he gives some old names of Multan. As with most other assertions about ancient Multan, the exact significance of these names is disputed, but they are capable of interpretation as referring to the sun. It will be noted that of all these authorities only the Chinese pilgrim and al-Birūnī call the idol a sun-god.

The magnificent income of the House of Gold consisted of offerings made to a famous idol. A well-known group of coins bears on the reverse side a deity which is also found on an exceptional issue in gold and silver of the Sassanian king Khusru Parvez (Khusru II) who reigned from A.D. 590 to 628. The pieces have attracted the attention of the great experts in turn—James Prinsep, H. H. Wilson, Edward Thomas, Alexander Cunningham, Édouard Drouin. They have agreed to disagree about the legends; there are formidable difficulties. It is only in the last few years that real progress has been made in the decipherment of inscriptions in so-called corrupt Greek characters; this achievement is due to Professors Herzfeld and Junker.³

³ *Memoirs of the Archaeological Survey of India*, no. 38, *Kushano*

The essay entitled "Later Indo-Scythians, Ephthalites, or White Huns" (*Num. Chron.*, 1894) embodies the mature experience of Sir Alexander Cunningham. He states that the famous temple at Multan was a temple of the sun-god, that it was built by the Ephthalite or Hūṇa chief Toramāṇa, and that the image of this sun-god appears on a group of coins belonging to rulers whom Cunningham calls actual kings of Multan and identifies with members of the Rai dynasty of Sind. The relation of the coins with Khusru II brings them within the period of the Rai dynasty. One thing only is related about these kings in addition to their names. The king of Seistan invaded Sind and slew Rāi Sahirās. This statement provides a contact with the Sassanians and is used by Cunningham (*Cunn.*, p. 271). I think that the weight of evidence is in favour of the idol of Multan being a sun-god. The statement that the temple at Multan was built by Toramāṇa is pure surmise. Not only must the uncertain name Jaswīn or Jabwīn of the Chachnāma be Javula, the tribal designation of the Hūṇas, the Ephthalite invaders of India, but the particular Javula has to be Toramāṇa. There is no other evidence. It seems unlikely on the face of it that a vagabond horde erected this temple. Sun worship was rare in India, but did exist before the arrival of influence from Iran. A Hindu ruler of the Solar Race could have built a temple to the sun-god; probably this particular fane existed long before the arrival of the Ephthalites. The identification of local Sind

Sassanian Coins, by Ernst Herzfeld, Calcutta, 1930; *Die Hephthalitischen Münzinschriften*, by Dr. Heinrich F. J. Junker, Berlin, 1930.

rulers belonging to the Rai dynasty with the great Hūṇa leaders Toramāṇa and Mihirakula is sheer fancy (*Cunn.*, p. 273). Cunningham was on firmer ground when he asserted that the Rai kings were White Huns (p. 275); not only were those rulers of Sind known by the title of Zambīl, but the earlier years of the dynasty synchronized with the period of Hūṇa supremacy in North-west India. Yaḳ'ūbī, Ṭabarī, and Mas'ūdī repeatedly allude to "the celebrated Rutbīl" who is variously designated as king of Kabul, of Sind, and of Sijistan (Seistan). Ibn Khallikān speaks of "a Turkish tribe in the territory of Sijistan governed by a king named Retbīl. Yaḳ'ūb bin Leis slew their king and three princes, all bearing the title of Retbīl." There was the Zant-bel, Ran-pāl or Ratan-pāl dynasty of Kabul and Zabul, also the Kabul Shāh, Ran-pāl or Ratan-pāl, the Zantbil of the Arabs.⁴ The title of Zambīl with its variants is applied like Shāhi and Tigīn to foreigners from the north-west who invaded India in the early centuries of the Christian Era. The word Zambīl seems to be derived from Zabula (Indian form Javula), the ethnic designation of the Ephthalites in the Indian borderlands. Zabulistan or Zabul, the Ghazni highlands on the Upper Helmand, was an Ephthalite province; in it we read the tribal name of the Hūṇa invaders of India. The epithet Zambīl was also applied to the conquerors of the Ephthalites, the Turks.

Now we come to the coins themselves. Sir Alexander Cunningham "ventured to suggest the identification of the rayed bust with the sun-god of Multan because the same bust appears on the coins of Shāhi Tigīn,

⁴ The Arab script is peculiarly liable to be misread and blundered by copyists.

and Vasu Deva, the actual kings of Multan"—*Cunn.*, p. 291. Mr. F. D. J. Paruck carried the matter to its logical conclusion when he wrote of "the gold and silver coins of Khusru II struck at Multan". This view of the case, based on Cunningham, is further elaborated with useful references.⁵ The coin of Shāhi Tigīn, preferably (as read by Drouin) Vāhi with the Turkish title Tigīn, is the celebrated trilingual piece illustrated at *Cunn.*, Pl. X, 9. There are fifty-five specimens in the British Museum. Cunningham read the Pahlavi reverse legend to right as *Takān Khorāsān Malka*, "the king of Takān and Khorāsān", and took it as the equivalent of "the king of India and Persia" of the Nāgarī marginal obverse inscription since Takān was the name of the Punjab. The bust on the reverse is described as a male head to front, with rayed flames ascending to a point, the sun-god of Multan [fig. 1].

The coin of Vasu Deva is *Cunn.*, Pl. X, 10; there are eight specimens in the British Museum. Cunningham read the obverse marginal legend in Pahlavi to left as *Wahman Multan Malka*, "king of Bahman and Multan"; Bahman was taken as referring to Bahmanabad, an old capital of Sind. The Pahlavi legends on the reverse were interpreted as *Takān Zāvūlastan*, "Punjab, Zabulistan", and *Sapardalakhshan*, "Rajputana" [fig. 3].

A third coin is in the British Museum and appears to be still unique: it is *Cunn.*, Pl. X, 11. The portrait resembles that of Vāhi in style, but there is the curious little figure in the right field. To the left of the head is a Kushan Greek legend and to the right a Pahlavi

⁵ *Sasanian Coins*, by F. D. J. Paruck, Bombay, 1924, pp. 125, 269 f.

inscription. The reverse bears a long marginal Kushan Greek legend. On each side of the deity is a Pahlavi inscription. The word on the right is clearly the equivalent of Zabulistan; that to the left was read by Cunningham as *Saparlakshan*, "Rajputana" [fig. 2].



Fig. 1.

Fig. 2.

Fig. 3.

The boundaries of the Rai kings of Sind are defined fairly accurately in the *Chachnāma*. Their dominion extended on the south to Dewal and the sea, on the west to Makrān, on the east to the boundary of Kashmir, and on the north to certain mountains. At this period the Kashmir power extended down to the Salt Range. The seats of the four governors are given: Bahmanabad (in Lower Sind), Siwistan (Sehwan), Iskandah (probably Uchh), and Multan. They show that the Sind of our period was much the same as modern Sind with

the addition of Multan. This local dynasty cannot be identified with kings of Zabulistan and Khorāsān. The vast extension of the Rai power to the west (*Cunn.*, p. 273) is incorrect. The word read as Kirmān should be Kuramān, the region of the Kurram Valley; this mistake has led to much misunderstanding.

Another work on Ephthalite coins claimed to have been struck at this period in Sind is Specht's *Du Déchiffrement des monnaies sindo-ephthalites* (*Journal Asiatique*, 1901, pp. 487 f.). Specht says that the alphabet is allied to those of Aramaic origin, calls the characters Sindo-Ephthalite, and reads from right to left the names and titles of pre-Muslim rulers given in the Chachnāma. The legends actually read from left to right in Kushan Greek characters, and the coins in question were struck by Zabuli kings of Balkh, Kabul, and Zabul. The matter is ably discussed by Junker (*op. cit.*, pp. 12 f.). But I had always distrusted the conclusions of Specht and Cunningham, because I was convinced from my own experience in India that the coins in question were not found in Multan and Sind, and had nothing to do with these parts.⁶ The find spots

⁶ The numismatic remains of pre-Muslim Sind are very meagre. Henry Cousens in his excellent and comprehensive work on *The Antiquities of Sind* (Calcutta, 1929), writes "A few coins of earlier dates than the Arab invasion have been found in Sind." Six Indo-Sassanian gold coins were discovered in the Larkhana district about the year 1908 (illustrated on p. 6), but appear to be without legend. Coins of an Ephthalite type are not mentioned; there is no Indo-Sassanian piece in Cousens' plate of Sind coins. Edward Thomas had already remarked on the very limited number of Hindu (pre-Muslim) coins found on the site of Bahmanabad among the multitudes of medieval pieces; even the former "seem to be casual contributions from other provinces of no very marked uniformity or striking age".

are usually on the N.W. Frontier, and in Afghanistan; the nearest place to Multan is Manikyala.⁷ Cunningham himself writes of the Vāhi coins: "Two specimens were obtained by Ventura in the Manikyala Stupa. Dr. Lord got forty to the north of the Caucasus. I have received some twenty or thirty from Kabul, and I am aware that a few have been found in Sindh and Kacch." Three out of Cunningham's four specimens of Vasu Deva came from the Masson Collection, and Masson got his coins in Afghanistan. To my mind the evidence of the find spots is conclusive. I agree with Edward Thomas that the triple legends point to a borderland where various languages met and interchanged methods of writing; Thomas suggested the locality of Bamiān, which seems likely.

A recent description of the Vāhi coin is that by Dr. Vincent Smith.⁸ He cannot read the word Takān, but the title "king of Khorāsān" is certain. The reading and meaning of the Brāhmī (Nāgarī) legend still remain obscure because the characters are imperfectly formed and vary much in different specimens. This was precisely the verdict of Edward Thomas, who wrote: "The truth is the Sanskrit characters are so imperfectly formed and vary so materially in different specimens that this in itself creates a tendency to distrust any decipherment however carefully collated."⁹ The die sinker was so poorly acquainted with the Indian alphabet that the legend has not been read with certainty after a century's efforts. On some Vasu Deva coins the Indian legend is written from right

⁷ *Ariana Antiqua*, by H. H. Wilson, London, 1841, p. 400.

⁸ *Indian Museum Coin Catalogue*, vol. i, p. 234.

⁹ *Journal of the Royal Asiatic Society*, 1850, p. 343.

to left. These facts point to an origin outside India proper.

Sir Alexander Cunningham described the deity on these coins as "male head to front, with rayed flames ascending to a point". The deity had to be male in order to be a sun-god. Edward Thomas noted that the face is unadorned by either beard or moustache, "but still in the majority of instances looks anything but feminine". The fact remains that the artist has carefully included moustache or beard in the king's portrait, and as deliberately omitted them from that of the deity. The contrast between the two busts is best studied on the piece of Vasu Deva. There is a significant difference in the arrangement of the embroidery. The features of the deity are not those of a beardless boy. One head is male and the other female; the deity is a goddess.

The only place-names which can be read with certainty on the three coins are Khorāsān and Zabulistan. The reading *mltan mlka* on the Vasu Deva piece is also certain. It is curious that of his four specimens Cunningham chose to illustrate that from which these all-important words had been obliterated.¹⁰ If the meaning were "king of Multan", the words would be *multan malka*. I have the great authority of Professor Ernst Herzfeld for stating that *mltan* means first of all *mardān*; *mardān shāh* is a well-known name or title.¹¹ The deity is an Iranian goddess. Professor

¹⁰ This was noticed by Professor Junker (*op. cit.*, p. 11).

¹¹ For the connexion in Iranian of *l* with *tr*, *rd*, &c., see E. Herzfeld's *Paikuli*, pp. 177f. See also *Ämtliche Berichte aus den Königl. Kunstsammlungen*, Berlin, Dec. 1912, p. 46. I am much indebted to Professor Herzfeld for the kind permission to publish his communication.

Herzfeld's opinion is as follows. The subject of the investiture of the king by different deities is found on Sassanian sculptures. For example, Ardashīr II receives the crown from Hormizd and Mithra, Khusrū II from Hormizd and Anahit, and Bahrām III from Anahit alone. Flandin and Coste in the work, *Voyage en Perse*, have figured the four sides of the capital of a Sassanian column.¹² On faces B and D are geometrical and floral designs: on face A is a haloed goddess crowning a king, on face C. The king is Khusrū II, and the goddess may well be that of our coins. This deity is connected with the east and Professor Herzfeld sees in her a possible analogue with Ardokhsho of the Kushan coins; Ardokhsho means "genius of the Oxus".

The piece of Vasu Deva is an imitation of the drachm of Khusrū II, Paruck, *op. cit.*, pl. XXI, 463: the gold coins of Khusrū II are figured at 455, 456, and 457. The issue is exceptional, and the pieces are extremely rare; unfortunately there is no mint monogram. Only four drachms of this type are known: one of year 26 (British Museum, Walker, *Num. Chron.*, 1935, pp. 242 f., Pl. XVIII. 3; two of year 36 (British Museum, *ibid.*, Pl. XVIII. 2, and American Numismatic Society); and one of year 37 (Vienna). For the bibliography of these coins see Walker, *ibid.*, note 3. The drachm of Vasu Deva has the same Pahlavi legend to left of the portrait as that of Khusrū, so should bear the name of the king to the right. The letters seem to be *sf versu tif*, probably the equivalent of Śrī Vāsu

¹² Flandin & Coste, *Voyage en Perse*, Paris, 1851, volume of Plates, Pl. 27 *bis*.

Deva as suggested by Cunningham and others.¹³ The representations of the kings on the remaining two coins are true portraits; belonging to the time of Khusrū II, they are probably Turks. The Ephthalites had been overthrown by a coalition of Khusrū I and the Turkish *khākān*; Chavannes shows that this victory took place between the years 563 and 567. The Western Turks for nearly a century succeeded to the Central Asian dominions of the Ephthalites, and for a time extended their supremacy to the Kabul valley. The limits of Khorāsān are discussed in *Paikuli*, vol. i, p. 37.¹⁴ The term designates the eastern quarter of Iran, north of the Hindu Kush; in later Sassanian times there was an extension south towards Makrān. Vāhi must have reigned both north and south of the Hindu Kush; the other two kings at least had control of Zabulistan. Cunningham's *Sapardalakshan* is read by Professor Junker as Dāwar, Rusnan.¹⁵ The unique coin differs from the other two because it does not bear an Indian legend; on the other hand, there is a long inscription in Kushan Greek characters. Professor Herzfeld has traced the use of this script continuously through the Kushano-Sassanian period to the time of Shāhpūr II. Professor Junker has read Balkh and other mint names in these characters on White Hun coins. The piece, *Cunn.*, Pl. X, 11, must be about the latest coin which

¹³ For Professor Junker's interesting discussion of the legends, see *op. cit.*, pp. 10, 11. Professor Herzfeld has drawn attention to the significance of the position of the coin portrait on Parthian and Sassanian money.

¹⁴ *Paikuli* by Ernst Herzfeld. Berlin, 1924.

¹⁵ *Sapardalakshan* = Siwālik or Rajputana west of the Aravalli Mountains (*Ind. Ant.* 1932, p. 92).

bears legends in this script. The Kushan Greek inscription on the Vāhi coin is *Sri shaho*.

To conclude, these hybrid coins were struck by kings with Sassanian affinities, not in the Punjab and Sind, but in Zabulistan and other debatable lands



between Iran and India. The pieces exhibit an Iranian deity taken from certain issues of the Sassanian king Khusrū II; this is probably a token of suzerainty. Recently a new type has been found; nothing can be said about the inscriptions as the piece is in poor condition, and the obverse legend is off the flan. The metal is copper, size 0.55 inches, weight 7.2 grains. The coin belonged to the author, and is now in the British Museum.

R. B. WHITEHEAD.

IV.

GOLD MEDALLIONS OF LYSIMACHUS AND KINDRED FORGERIES.

[SEE PLATE VI.]

AMONG the gold medallions in almost all the larger collections we find distaters and tetrastaters of Lysimachus of Thrace. There are, however, a number of other show-pieces of very similar weight, usually four staters, the connexion of which with one another and with those of Lysimachus I shall show in this article. For the most part they have already been recognized as forgeries, but I have still been able to find some among genuine coins. As was the custom in the seventeenth and eighteenth centuries, these imitations were also made in silver and bronze, but much less carefully, so that they were long ago condemned as forgeries.

In the following article I shall first of all give a catalogue of the pieces known to me. It is, however, by no means a complete list. This is neither necessary nor worth the trouble. Unfortunately information is very often difficult or even impossible to obtain. Particularly regrettable is the almost universal lack of information about provenance. The second part will deal with the originals and the method of production. The third section will give all that I have discovered about the origin of this series. It will be a new contribution to the history of coin-forgery for which very little has really been done so far.

I. CATALOGUE.

1. *The Lysimachus type.*

Obv. Horned head of Lysimachus to r.

Rev. ΒΑΣΙΛΕΩΣ ΛΥΣΙΜΑΧΟΥ Athene Nikephoros seated to l.; in the field on l. beside her a trophy¹ and on the margin Γ; in the exergue, a crescent; [Pl. VI. 1.]

IN GOLD.

(a) *In Public Collections.*

1-5. Vienna, 35.1 g., 35.0 g., 34.4 g., 17.5 g., 17.1 g.

Nos. 1-4 were published in the *Catalogus Musei Caesarei*² but were not yet in the *Cimelium*.³ Eckhel added 2 and 5 in manuscript. They obviously come from monasteries abolished by the Emperor Joseph II (1780-1790). No. 2 may be the piece mentioned by Hanthaler⁴ from the Lilienfeld Abbey in Lower Austria. No. 3 was in the Theupoli collection;⁵ to it Arneth has added the note "spurious".

6. Belgrade, Weifert collection,⁶ 34.95 g.

7-8. Berlin, 35.08 g., 35.1 g.

9. St. Florian Abbey (Upper Austria), 18.12 g.

The piece comes from the collection of Apostolo Zeno. On the ticket is written Merzbacher 471, but

¹ This symbol has been variously described (cf. Müller, *Die Münzen des thrakischen Königes Lysimachus*, Copenhagen, 1858, p. 163). The trophy on the silver coins from Baluchistan attributed by Rapson to Antiochus I of Syria is very similar (*Num. Chron.*, 1904, pp. 311 ff., Pl. xvii).

² By Josef Eckhel, Vienna, 1779.

³ *Numismata Cimelii Caes. Reg. Austr.*, 1755.

⁴ *Exercitationes faciles de numis veterum*, Vienna, 1756.

⁵ *Musei Theupoli antiqua numismata*, Venice, 1736.

⁶ *Slg. Georg Weifert*, von G. Elmer, Vienna, 1929 (in typescript).

I do not know which auction is meant (information supplied by Prof. Nikolussi).

10. Florence Mus. Archeol.,⁷ 17·7 g.

11. Glasgow, 34·6 g.

As Sir George Macdonald kindly informed me, this piece with two silver forgeries belonged to the Hunter collection—i.e. was known before 1782. The Hunter cabinet incorporated the de France collection which came from Vienna and also contained forgeries.⁸

12–14. Gotha: 3 tetrastaters, Rathgeber, nos. 5–7.⁹

15. Gotha: distater, Rathgeber, no. 8.

A tetrastater is mentioned in Liebe¹⁰ and the same one in Gessner.¹¹

16. Leipzig: tetrastater mentioned in Wachter.¹²

17. London, 34·7 g.

18. Munich: tetrastater.¹³

19–21. Paris: 3 tetrastaters.

22. Paris: weight not given.

Nos. 19–21 are mentioned by Mionnet, i, 437–438, 2–4, who remarks: “Ces trois médaillons d’or sont faux.” No. 22 is from the Rothschild collection, no. 941 (information supplied me by M. Babelon). There is

⁷ Gori in vol. ii of the *Antiqua numismata Musei Florentini*, p. 18, probably refers to this piece, although his description differs slightly.

⁸ Cf. my notes on St. Urbain’s forgeries, *Num. Chron.*, 1933, p. 33, note 13.

⁹ *Numism. Zeitung*, ed. Leitzmann, 1838, p. 37.

¹⁰ *Gotha Numaria*, Amsterdam, 1739.

¹¹ *Numismata regum Macedoniae*, Zürich, 1736, Pl. VI. 37.

¹² *Archaeologia Numaria*, Leipzig, 1740, p. 67.

¹³ Franz Ignaz Streber, *Fortsetzung d. Geschichte des kgl. baier. Münzkabinetts in München*, Denkschr. d. k. Akademie d. Wiss., Munich, 1815, p. 51 note.

one among the sulphur casts (*Catalogue d'une collection d'empreintes en soufre*, Paris, An viii, no. 413).

23. Zürich: distater, in Gessner, *op. cit.*, Pl. VII. 1.

(b) *Known from literature.*

24. Albani:¹⁴ tetrastater.

25-26. D'Ennery: tetrastaters.¹⁵

27. D'Ennery: distater.

28. Maréchal d'Estrées:¹⁶ tetrastater.

29-31. Maréchal d'Estrées: 3 distaters.

32. Haverkamp:¹⁷ tetrastater.

On no. 32 Haverkamp notes (*op. cit.*, p. 70): "Ouk houde ik . . . de elfde schon konstig gemaakt (en in alle metaalen met eenen en den zelfden stempel gemunt) vor keene echte stukken der Oudheid."

33. Pembroke:¹⁸ tetrastater.

34. Pembroke: distater.

35. Wiczay:¹⁹ tetrastater.

36. Wiczay: distater.

On no. 35 is noted "Suspect"; on no. 36 "Item susp. novi commatis". Similarly, Sestini, in *Mus. Hedervar.* 4, 1, 86: "numi fabricae recentis".

All these gold pieces are made from the same pair of dies. They are characterized by a scratch on the neck of Lysimachus which appears on all specimens. Müller, p. 6, note 23, thinks there are six different dies known,

¹⁴ *Antiqua Numismata ex Museo Alexandri S.R.E. Card. Albani*, Rome, 1739, Pl. I. 2.

¹⁵ *Catalogue des Médailles*, Paris, 1788, nos. 42-44.

¹⁶ In Liebe, *op. cit.*, p. 7. Cf. Montfaucon, *Antiqu.*, iii, 121, (1724).

¹⁷ *Algemeene Histori*, Haag, 1737, ii. Pl. XXXVI. 11.

¹⁸ *Numismata Antiqua*, London, 1746, Pl. II. 540 and 265.

¹⁹ *Musei Hedervarii numos descripsit Wiczay*, Vienna, 1814, no. 2525 and 2526.

but he has been misled by the varying descriptions in the literature. The pieces are also often disfigured by double-striking. The crescent in the exergue in particular is frequently taken for a letter or ivy-leaf, and sometimes it does not appear at all.

The same pieces are also found in silver and bronze. There are silver in Vienna, Gotha, Glasgow, and Copenhagen, and no doubt elsewhere. This is also true of the bronze, of which there are two specimens in Vienna, and, as Rasche²⁰ shows, they were at one time in many collections. Haverkamp says (*op. cit.*, p. 70), that they were struck from the same dies in all metals.

2. *The Cos Type.*²¹

(a) *With Nikias.*

Obv. ΙΠΗΝΑΙΟΣ ΚΟΙΩΝ Head of Asclepios r. [Pl. VI. 2.]

Rev. ΝΙΚΙΑΣ Head of Nikias r.

ONLY IN BRONZE.

1. Vienna, cast.

2. Goltz, iii, p. 272, Pl. XXI. 7. He reads ΙΠΗΜΑΝΟΣ.²²

(b) *With Lysimachus reverse.*

Obv. As no. 2 (a) above.

Rev. As 1 above. [Pl. VI. 3.]

²⁰ *Lexicon universae rei numariae*, ii, 2 (1786), Lysimachus, p. 1930, c. 78-80.

²¹ To this group perhaps also belongs the gold piece which Haverkamp, *op. cit.*, Pl. XXVI. 7, describes as genuine from the Goltz collection (*ibid.*, iii, Pl. XXXVII. 8, p. 193, as well as in Gessner, Pl. VII. 2). The so-called head of Zeus is perhaps that of Asclepios with whom he is often confused; the inscription is lacking, however; cf. Müller, *loc. cit.*, note 27.

²² *De re nummaria antiqua opera*, Antwerp, 1708.

IN GOLD.

1. Vienna, 35.5 g.
2. Munich: tetrastater.²³

There are two casts in silver in Vienna. The silver piece appears to be first mentioned in Maffei,²⁴ from whom Fröhlich²⁵ takes it. Rasche mentions a piece from Bentinck's collection in the *Suppl.*, ii, 194.²⁶ So far no specimen seems to have been found in bronze.

(c) *With seated Demeter.*

Obv. As 2 (a).

Rev. Demeter seated on *cista mystica*, with ear of corn and sceptre. [Pl. VI. 4.]

This piece is known only in gold in one specimen from the collection of Count Daneschiold, and has the remarkable weight of 23.24 g. It is now in Copenhagen, as M. Niels Breitenstein kindly tells me. Haverkamp probably refers to this piece, *op. cit.*, Pl. XXXVI. 12, but by a slip the obverse of no. 11 is repeated.

3. *Type of Julia Titi.*(a) *With the portrait of Julia.*

Obv. IVLIA IMP · T · AVG · F · AVGVSTA Bust r.

Rev. S.C. Vesta seated l. In exergue VESTA. [Pl. VI. 5.]

In Vienna there is a specimen, so far unique, in gold (28.10 g.) cast from a medallion by Cavino in bronze, which in turn was copied from the dupondius. The

²³ Franz Ignaz Streber, *Versuch einer Gesch. des kgl. baier. Münzkabinetts*, Denkschr. der k. Akad. d. Wiss., Munich, 1808, 391, note 1.

²⁴ *Verona Illustrata*, Verona, 1732, iii, 238.

²⁵ *Notitia element. Num. Ant.*, Vienna, 1758, p. 150, Pl. X. 1.

²⁶ *Médailles antiques*, Amsterdam, 1787, II, 1096.

gold piece was, as Eckhel tells us (*D.N.*, vi, 152), put by him in the Royal collection "haud ita pridem". A silver specimen seems to be recognizable in the piece reproduced in Gessner,²⁷ Pl. LXIII. 14, a similar one in Pelerin,²⁸ Pl. VII. 9.

(b) *With the head of Asclepios.*

Obv. As 2 (a).

Rev. As 3 (a). [Pl. VI. 6.]

Of this piece also I so far know only one specimen, that in Vienna, already mentioned by Fröhlich, *loc. cit.*, who says he has seen it in the trade and thought it genuine. But Eckhel turned it out of the collection as false.²⁹ There is also a cast in silver in Vienna which, according to Eckhel,³⁰ was in the Neumann collection. Neumann, who died in 1816, bequeathed his collection to the Vienna cabinet.

(c) *With PIETAS.*

Obv. PIETAS; bust of Livia r.

Rev. As 3 (b). [Pl. VI. 7.]

IN GOLD.

1. Vienna, 34.7 g.
2. Vienna, 34.9 g., but coarser *obv.* die.
3. Berlin, 35.045 g.
4. Copenhagen, 35.14 g., from the Daneschiold collection.
- 5-10. Munich, 6 specimens, according to Streber, all tetrastaters.
11. Christ Church, 34.85 g., Oxford.³¹
- 12-13. Paris. Two specimens of which I do not have the weights.

²⁷ *Numismata antiqua imperatorum Romanorum*, Zürich, n.d.

²⁸ *Mélange de diverses Médailles*, Paris, 1765, I.

²⁹ *Nimi Veteres Anecdotti*, Vienna, 1775, i, p. 63.

³⁰ *Doctrina Numorum*, vi, 152.

³¹ Information kindly supplied by Mr. C. H. V. Sutherland.

From literature we should also mention the specimen from the Pfau collection in Gessner, xxxi, 1, which is obviously that in Berlin; also Pembroke, i, Pl. XXXVII. 2, and Rinkh,³² no. 101. Eckhel notes (*D.N.*, vi, p. 151), "Horum complures in museis nostris vidi." In Vienna there is also a cast in silver and a bronze piece and it may be assumed that there are others elsewhere.

II. THE METHOD OF PRODUCTION.

As will be evident from the above Catalogue, there are three main types which have served as models.

For the Lysimachus type 1 (a) and (b), the model was a silver tetradrachm of Lysimachus such as is described in Müller under no. 291 and attributed to an uncertain mint in Thrace. Rathgeber (*loc. cit.*) had already called attention to a similar piece in Paris among Mionnet's sulphur casts, no. 58 (i, p. 442). In other collections also the coin is found, e.g. Haverkamp, *op. cit.*, Pl. XXXV. 6, from the Scaliger collection. I refer to the *obv.* as A and the *rev.* as B.

For the type of Cos, type 2 (a)-(c), the model was the bronze piece of Nikias, tyrant of Cos in the second half of the first century B.C., reproduced, e.g. in *B.M.C. Caria*, Pl. XXXII. 13. It is a common coin and is found with a number of magistrates' names; but the name ΙΓΗΝΑΙΟΣ is not found among these. The forger probably had a poorly preserved specimen with the name ΕΙΡΗΝΑΙΟΣ like Waddington, no. 2755. The E had disappeared and the P was indistinct, so that

³² *Numophylacium Rinckianum*, Leipzig, 1766, no. 101.

an ignorant person could easily read ΙΓΗΝΑΙΟΣ. Later we actually find it read ΙΓΗΜΑΝΟΣ. Perhaps the interpretation of Asclepios as god of "Hygiene" facilitated this misunderstanding. *Obv. C, rev. D.*

The third type (3 a-c), that of Julia Titi, is taken from the dupondius of this princess, e.g. *B.M.C. Rom. Emp.*, i, Pl. 53, 8. In Vienna there are two "Paduans" of this coin from the same die, *obv. E, rev. F.* In addition to these three main types, the following coins were used as models. For the Pietas the *rev.* of the dupondius of Drusus Caesar, *B.M.C. Rom. Emp.*, i, Pl. 24, 7. We shall refer to this as G. For the remarkable piece 2 (c) from Copenhagen with seated Demeter, the model was probably the tetradrachm of Paros, *B.M.C. Crete*, Pl. XXVI. 10, with Demeter Thesmophous. But the forgery is very crude. This reverse I call H. If, as I have suggested in the note on 2, the pieces with Zeus Aetophoros had as *obv.* also the Asclepios head, this reverse which is taken from the earliest tetradrachm of Lysimachus copying Alexander would belong to here (I).

These models have yielded, as a result of combinations of dies, the following pieces, 1 = AB, 2 (a) = CD, 2 (b) = CB, 2 (c) = CH, (2 note = I), 3 (a) = EF, 3 (b) = CF, 3 (c) = GF.

The question of the technique of manufacture is also important. The silver and bronze seem to be cast, with the exception of the Paduans. It is different with the gold pieces: some seem to be cast, some struck; nor did the answers to my questions—when received—all agree. It should further be pointed out that many pieces are double-struck. In the case of St. Urbain's forgeries, I have already called attention to the same

feature in these pages.³³ Hill³⁴ has shown the use of a process in the Renaissance period which consisted of making a mould from a die, which was then used for casting. The piece itself—the process was mainly used for thick pieces—was then cast and afterwards struck with the same die. This is the simplest way to explain the double-striking.

III. THE ORIGIN OF THE FORGERIES.

The oldest reference that I know to these forgeries is to the bronze copy of the Lysimachus tetradrachm by Cavino in Constantius Landus, in his *Explicationes*—which he dedicates to Bernardus Beorgontius, Governor of Piacenza—p. 22, under the heading *Lysimachi Numisma*: "Apud Joannem Cavinium, Patavinum, aurificem celeberrimum, numisma aeneum vidimus, in quo Lysimachi Regis Thracis facies cornigera efficta extabat, ex altera parte. In altera vero parte erat mulier armata, sedens in clypeo, cum victoriola in manu, his verbis graecis ΒΑΣΙΛΕΩΣ ΛΥΣΙΜΑΧΟΥ, quod numisma eo libentius vidimus, propterea quod rarum inventu est, nec multum circumfertur, ostendebat, autem, nobis idem Joannes Cavinus, aurifex nobilissimus, et summus Antiquarius, quaedam praeclara

³³ *Num. Chron.*, 1933, 203 ff.

³⁴ *Medals of the Renaissance*, Oxford, 1920, p. 27. Regling refers to the same process in his article "Guss" in Schrötter's *Wörterbuch der Münzkunde* (Berlin, 1930). My colleague, Dr. Fr. Dworschak, in his book (with Moeser) *Die grosse Münzreform unter Erzherzog Sigmund von Tirol*, Vienna, 1936, pp. 32 ff., has called attention to the use of this process for the earliest Austrian medals. The medals of Emperor Maximilian I also frequently show a similar double-striking.

operis sui monumenta. . . .” I quote from the edition by Baldwin Vander, Leiden, 1695. In the original edition of 1559, which I have not seen, there are no illustrations, as is evident from the dedication: “nec illa (scil. miscellanea numismatum) imaginibus suis ostentata a me nunc expectabis: quod scio a plerisque factitatum. Non enim id nos efficere valuimus, licet omni cura studuerimus: tum inopia angustiaque temporis: tum periti artificis delineatorisque carentia: tum avaritia librariorum, et quorundam nimia quadam scrupulositate, quorum erant nummi. . . .” Vander has added illustrations to the edition of 1695, but nothing can be deduced from them about the original types; it is therefore no wonder that the Lysimachus coin illustrated is of a type different from what we expect.

It may therefore, with good reason, be assumed that the model first copied for our Lysimachus type was one of Cavino’s pieces: this is all the more likely as there are specimens of type 3 also, the Julia Titi, noted in the Vienna cabinet as Paduans.

On Giovanni Cavino we have a comprehensive work, *Medals by Giovanni Cavino*, by R. H. Lawrence, New York, 1883. In the introduction he tells us that Cavino lived in Padua about 1500–1570 and that he was celebrated for his copies of Roman bronze coins, which he prepared quite honestly as Renaissance medals. His dies passed to his son, who continued to use them. In the seventeenth century Th. Lecomte purchased from the Lazzara family in Padua 122 Cavino dies, and in 1570 presented them to the Abbey of St. Geneviève. But neither this die nor that of the Julia Titi is found among these dies, which were published by Claude Molinet in 1672 and of which impressions in white

metal are possessed by every large collection. Nor is there any trace of them in Forrer's lists in the Bibliography in his *Dict. of Medallists*, s.v., nor in Bernhart in his list of the Munich pieces,³⁵ but we know from these lists that other Greek coins were imitated, including some in silver. So far as I can ascertain, the gold medallion of Lysimachus first appears in Liebe, i.e. in 1730. But by 1737 Haverkamp says that there are many such pieces about in all three metals and that they come from modern dies. About the same time we begin to find them in many books and collections as is evident from the above Catalogue. But no one seems to have paid any attention to Haverkamp's assertion. Eckhel still considers them genuine. It is not till Wiczay (1803) and Mionnet (1806) that they are again rejected as false. But to this day they are still to be found among genuine coins.

The oldest reference that I have been able to find to the gold medallions of Livia is by J. Weidner in his pamphlet *Pietas in nummis*, Jena, 1694. He knows the piece from the collection of the Augsburg syndicus Thomann, which he left to his son. The son was a patron of Weidner's.

As regards the origin of these gold medallions, the note in Apostolo Zeno³⁶ in his letter to Annibale degli Abbatì Olivieri in Pesaro, written on April 2, 1736, regarding his reading of Gori's book which had just appeared on the coins in the museum in Florence, is instructive: "Non posso dissimularvi la sorpresa che mi ha cagionato, il vedere in questa classe quel medaglione di Livia esaltato per rarissimo e singolare. Sopra

³⁵ *Blätter für Münzfreunde*, 1912, 5054.

³⁶ *Lettere di Apostolo Zeno*, Venice, 1752, III, 420, Letter 276.

di esso vi dirò il mio sentimento. Sappiate adunque, che quel medaglione cotanto esaltato, è lavoro moderno, e che va per le mani di molti. Io ne ho veduti altri simili più di venti, non solamente in Italia, ma in Germania ancora, dove sono stati battuti nella *Corte Elettorale di Monaco* già 60 o 70 anni in circa, dove pure si è fatto il conio di molti medaglioni in oro dello stesso peso, o di poco disuguali, di vari Imperatori, come di Augusto, di Vespasiano, di Pertinace, da me veduti, ma non mai acquistati, perchè moderni."

On the same gold piece of Livia P. M. Paciaudi next observes in his *Animadversiones philologiae* (Rome, 1757, p. 156): "Sed a viri doctissimi (i.e. Gori) judicio desciscere nos jubet Apostoli Zeni harum rerum in paucis peritissimi testimonium, qui Germaniam peragrans, cimelium hoc tantarum laudum dum saeculo superiore flatum detexit Vindelici Principis jussu, qui varia huius generis missilia aurea ad exemplum antiquorum aereorum numismatum efficta interdum largiebatur."

Eckhel deals with these gold medallions in vol. vi of the *Doct. Num.* (1796) and quotes the above passage from Apostolo Zeno's letter. In this connexion he mentions the similar forgery of Julia Titi with Vesta (3a) which he had only recently put in the collection with great glee in order to prove that these were forgeries: also the two types with ΙΓΗΝΑΙΟΣ (3b, 2b).

Streber mentions in the first part of his *Geschichte des Münzkabinettes in München* (1808-1809), p. 389: "Da nun viele der nicht-römischen Städte, Völker und Könige, besonders in den älteren Zeiten, gar nicht oder sehr wenig in Gold ausgeprägt hatten; da dies bei den Römern zur Zeit der Republik derselbe Fall war, so

entstanden in den neu anzulegenden Goldsammlungen grosse Lücken, die man mit wahren Antiken nicht auszufüllen wusste. Aber die schlaunen Köpfe, welche zu jeder Zeit und an allen Orten aus den Schwachheiten der Grossen und Reichen Vorteil zu ziehen wissen, fanden auch hier Mittel, den Sammlergeist derselben zu befriedigen, sich aber für ihre Mühe reichlich bezahlen zu lassen. Sie formten sich von einer echten Münze in Silber oder Erz ein Modell, gossen das verlangte Metall darein und so war die gesuchte Goldmünze fertig, zwar nicht antik, aber nach einer wahren Antike und bei dem damaligen Stand der numismatischen Wissenschaft leicht für antik zu nehmen. Oder sie verfertigten selbst eigene Stempel, die manchmal so glücklich und dem Gepräge echter Münzen so ähnlich aussehen, dass nur ein sehr geübtes Auge den feinen Betrug entdecken kann, ihre Kunsterzeugnisse aber in ästhetischer Hinsicht noch jetzt bewundern muss. Beide Verfahrungsarten scheinen auch hier in München angewandt worden zu sein, um die beliebten Reihen gross und zahlreich zu machen. So besitzen wir, um nur ein Beispiel anzuführen, von einer Goldmünze der ersten Grösse auf die Kaiserin Livia, (August's Gemahlin) 6 Exemplare, jedes zu 10 Dukaten, wovon die Hauptseite ein weibliches verschleiertes Gesicht vorstellt, mit der Unterschrift: **PIETAS**; auf der Rückseite sitzt die Göttin, in der Rechten das Palladum, in der Linken die Hasta, darunter **VESTA. S. C.**" ["As many of the non-Roman towns, peoples, and kings, especially in the older period, did not strike gold or struck very little, as it was the same with the Romans in the time of the Republic, there were great gaps in the collections being made

which could not be filled with genuine ancient coins. But the cunning rogues who at all times and in all places are able to reap advantage from the weaknesses of the great and rich, here found a way to satisfy the collector's ambition and to be amply paid for their trouble; they made a mould from a genuine silver or bronze coin, made a cast in the desired metal from it, and there was the desired gold piece ready, not ancient, it is true, but made from a genuine ancient coin and in the then state of numismatic knowledge easily taken for ancient; or they made their own dies which were sometimes so successful and looked so like genuine coins that only a very skilled eye is able to discover the deceit, but from the aesthetic point of view has to admire their artistic skill. Both methods of manufacture seem to have been used here in Munich to make the popular series large and numerous. Thus, to take an example, we have six specimens of a gold coin of the largest size of the empress Livia, each of ten ducats, of which the obverse has a veiled female head with the inscription PIETAS. On the reverse is seated the goddess, holding the palladium in her right hand and a *hasta* in her left, with VESTA S C below."] He then quotes the letter of Apostolo Zeno and concludes: "Noch bin ich nicht im Stande, mit Gewissheit bestimmen zu können, wer zu solch einer falschen Massregel die Idee gegeben oder die Hand geboten habe. Aber dass es um diese Zeit geschehen sei, dünkt mir höchst wahrscheinlich." ["I am not yet in a position to say with certainty who first had the idea for this deceitful scheme or gave it support. But that it took place at this time seems to me most probable."] In the

note he quotes a passage from Patin's *Introductio ad historiam numismatum* (1683), in which it is said that the Elector Maximilian of Bavaria (1623-1651) had over 1,400 Roman gold coins, including many forgeries, and that his enthusiasm was abused to foist upon him forgeries, which a Jesuit was alleged to have made. In an earlier note he mentions the gold medallion with head of Asclepios and reverse of Lysimachus, also in the Munich cabinet. In part 2 of his *Geschichte* (1815) he mentions in the note to p. 51 that there were in the collection about 24 gold pieces of Lysimachus from modern dies, including a medallion of four staters.

In the *Numismatische Zeitung*, ed. by J. Leitzmann, 1838-1839, G. Rathgeber described the Thracian coins of the Grand Ducal Cabinet in Gotha. There he writes (vi, no. 5, col. 36) of the silver tetradrachms of Lysimachus with Γ and crescent, and adds: "Probably as early as the sixteenth century a forger made from this coin an enormous number of false pieces, gold and silver, which seem to have found their way into all the important collections."

Friedlander has already pointed out that all the Lysimachus pieces are from the one die, and he divides them into two groups, distaters and tetra-staters.³⁷

Of the dupondius of Julia Titi there are, as already observed, two strikes by Cavino in the Vienna cabinet and a cast in bronze (in addition to the gold medallion).

³⁷ *Ein Verzeichnis von griechischen falschen Münzen*, etc., Berlin, 1883, p. 20.

If we now sum up all our information we come to the following conclusion. In Padua Cavino made a piece of Lysimachus, copying the tetradrachm, and also one from the dupondius of Julia Titi. It is surely not too hazardous to assume there was also a similar Paduan of Nikias of Cos, from which we have the cast in bronze in Vienna. For as Regling observes in Schrötter's *Wörterbuch für Münzkunde*, under "Paduaner", the casts are more common than the struck pieces. About the middle of the seventeenth century Cavino's dies were purchased by the Lazzara family. A large number (122) eventually came to Paris; it is not known what became of the others. Some, however, seem also to have gone to Munich, at least the Lysimachus, the Nikias, and the Julia Titi, perhaps also the Drusus with Pietas. They inspired some unknown individual in Munich, probably one of the many goldsmiths there, to use these dies to strike gold medallions. He was encouraged to do this by the great enthusiasm for collecting at this time everywhere, and particularly by the keenness of the Elector Maximilian and the desire to supply missing types. As Streber says, as a result of the wars there was little opportunity for collecting under Maximilian's successors. We may therefore, taking into account the passage in Patin, put the beginning of these forgeries before 1651. The natural and better pieces of Lysimachus at first aroused no suspicion, but Apostolo then recognized the mules of Livia as forgeries. At the beginning of the eighteenth century we find these gold medallions in many collections, but the voice of Haverkamp, who had declared those of Lysimachus false also, was unheeded. It is not till the beginning of the nineteenth century

that we find these forgeries generally recognized as such, but here and there they are still to be found among the genuine coins.

Prof. H. Gaebler has written three interesting articles³⁸ on ancient and modern forgeries, and shown that even the well-known note "from an old collection" is no guarantee. There are still many such pieces in our trays. Only when we have succeeded in identifying series of forgeries and their makers shall we have more certainty. Ever since the Renaissance and the pleasure that it aroused in ancient coins we have had imitations, for here once again the Devil was on the spot when the work of creation was barely finished.

KARL PINK.

³⁸ *Fälschungen makedonischer Münzen*, Sitzber. d. preuss. Akad. d. Wiss., i, 1931; ii, 1935; iii, 1936.

V.

COINS OF OLBIA.

[PLATE VII.]

FEW sections of the Greek collection in the British Museum have received such numerous additions of recent years as that which includes the Tauric Chersonese and Sarmatia. The present numbers as compared with those of the *Catalogue of Thrace, &c.*, published in 1877, are as follows, the numbers in the Catalogue being placed in brackets: Chersonesus 188 (11); Nymphaeum 2 (none); Panticapaeum 115 (52); Theodosia 3 (none); Olbia, cast, 47 (3); struck, 365 (20); Tyra 55 (2).

This great increase, which is, of course, chiefly in bronze coins, is due to the acquisition of the Mavrogordato Collection in 1905, the Doguel Collection in 1929, and many coins from the collections of Berthier de la Garde and of the Grand Duke Alexander Mihailovitch, purchased at different times during the past few years. The most important pieces have naturally been already published in the periodic articles on recent acquisitions, but a great many interesting coins remain, and a selection of the silver of Olbia is presented in this article. Certain of the coins are the actual specimens illustrated in the Berlin *Corpus*,¹ but as no text was ever published to accompany

¹ Imhoof-Blumer, *Die antiken Münzen Nordgriechenlands*, i, Taf. IX-X. This section was entrusted to the Grand Duke, who appears to have used his own collection largely for illustration.

the plates they are described here. Coins from the Mavrogordato and Doguel Collections are noted as such, the rest are from the Grand Duke's Collection.

1. *Obv.* Head of Demeter l., wearing necklace, with flowing hair bound with corn-wreath from which two ears stand upright above the forehead.

Rev. Sea-eagle, with head turned back, standing on dolphin l.; beneath OABIO; on r. traces of monogram, perhaps Σ E.

AR \uparrow 24.0 mm., 150.4 gr. (9.75 grm.). Helbing, 9: xi:28, lot 3738. [Pl. VII.]

2. *Obv.* Similar.

Rev. Similar, but below, on l. and r., \square

AR \leftarrow 24.0 mm., 126.7 gr. (8.21 grm.). Naville, iv (1923), lot 497. Burachov, T. VI. 135.² [Pl. VII.]

3. *Obv.* Similar.

Rev. Dolphin l.; beneath, OABIO; trace of circular incuse.

AR \uparrow 15.0 mm., 46.9 gr. (3.04 grm.). Doguel Coll. As Burachkov, T. IV. 47. [Pl. VII.]

4. Similar. *Rev.* Above, OABIO; beneath, Δ HMH

AR \uparrow 16.0 mm., 54.3 gr. (3.52 grm.). [Pl. VII.]

5. Similar, but *rev.* above, OABIO; beneath, Σ ON

AR \uparrow 17.0 mm., 50.9 gr. (3.30 grm.).

Nos. 1-3 are of the late fourth century. Their weights already show a modification of the original Aeginetic standard in use in Olbia as in the other cities of the Black Sea. Although the stater (no. 1) has suffered somewhat from wear, its weight appears to be reduced to that of the contemporary staters of

² The references to Burachkov are to the plates of his Catalogue (in Russian) of coins of the Greek colonies of South Russia, published at Odessa in 1884.

Chersonesus, while the subdivisions are thirds rather than quarters. Staters and thirds of similar weight form the coinage of the much later Scythian king Ininsimeus, struck at Olbia in the first century B.C. The weight of no. 2 is hard to account for, and it may belong to a later period. Burachkov's example was a stater of full weight scaling 185.0 gr., and the present coin, though short of this by nearly a third, is probably intended for the same denomination. It is of very base metal, and may have lost in cleaning.

6. *Obv.* Bearded head, horned?, facing.

Rev. Dolphin l.; above, OABIO; beneath, KPI.

↑ 13.0 mm., 52.4 gr. (3.40 grm.). [Pl. VII.]

This third-stater must belong to the fourth century. The same magistrate's name is found on a similar coin, also bearing a facing head, but of inferior style and of a different deity, Demeter (*Corpus*, Taf. X. 10 and Burachov, T. III. 21). Here the details of head and ear are unfortunately indistinct, and the horn on the temple is not quite certain. If the head is horned it must be that of the river Borysthenes who appears with the same brutal features, though in profile, so commonly on the bronze coinage. Otherwise it might be a local fertility god perhaps assimilated to Silenus or Dionysus, such as Rostovtzeff has identified on the coins of Panticapaeum.³

7. *Obv.* Turreted head (Demeter?) r.

Rev. Archer shooting l.; inscription off flan.

AR ↑ 11.5 mm., 27.8 gr. (1.80 grm.) as *Corpus*, Taf. X. 4.

7a. Similar. *Rev.* on l., O Λ.

AR ↑ 10.0 mm., 12.0 gr. (0.78 grm.).

³ *Iranians and Greeks*, p. 80; usually described as Pan or satyr.

A sixth- and twelfth-stater round about 300 B.C. In view of the reverse type and of the not-infrequent representations of Artemis with the turreted crown at Chersonesus, the head might at first sight be regarded as that of Artemis. It must, however, be Demeter's, as is shown by bronze coins of the same types (*Corpus*, Taf. X. 1-2) on which a wreath of corn-ears is added to the turreted crown. In both cases we probably have to do with the native Mother-Goddess, who was identified here with Demeter, there with Artemis, and elsewhere with Aphrodite, and was regarded, as the turreted crown suggests, as the patron and protectress of the state.⁴

8. *Obv.* Head of Demeter? r., with long hair; no wreath visible; in cm. bow-case?

Rev. Eagle r., with open wings and head turned back, standing on dolphin r.; beneath, ●ΛΒΙ●; above, ΣΙ.

AR ↑ 16.5 mm., 55.8 gr. (3.62 grm.). *Corpus*, Taf. X. 11. [Pl. VII.]

9. *Obv.* Similar, same cm.

Rev. Dolphin r.; above, ΣΙ; beneath, ●ΛΒΙ[●].

AR ↑ 16.0 mm., 68.1 gr. (4.41 grm.). [Pl. VII.]

10. *Obv.* Similar, same cm.

Rev. Similar; above, ΑΘΗ; beneath, ●ΛΒΙ●.

AR ↑ 17.0 mm., 59.2 gr. (3.84 grm.). [Pl. VII.]

With these later coins the really base silver issues, of which something must be said below, begin in earnest. It looks at first sight as if the difference in type between nos. 8 and 9, struck by the same magistrate, was intended to mark the difference in denomination between the third and the half. This may be

⁴ Rostortzeff, *ibid.*, pp. 72-73, &c.

so, but the intermediate weight of no. 10, which, by type, should equally be a half, suggests a doubt which can only be resolved by the collection of more material. The name $\Lambda\theta\eta$. . . occurs on a bronze coin of similar period (Burachov, T. IV, no. 59).

11. *Obv.* Head of Hermes l. in flat petasus with button; dotted circle.

Rev. Winged caduceus; on r., $\text{O}\Lambda\text{B}\text{I}\text{O}$; on l., $\text{I}\Lambda\Delta\text{N}$

(a) \mathcal{A} \uparrow 22.5 mm., 53.6 gr. (3.47 grm.). Mavrogordato Coll. [PL. VII.]

(b) \mathcal{A} \uparrow 22.5 mm., 48.1 gr. (3.12 grm.). Naville, IV (1922), lot 501.

These two coins are from the same obverse, but apparently different reverse dies. The types are new in silver though they appear on rare bronze coins, perhaps contemporary (*Corpus*, Taf. X. 32-33). No. 11 (a) is overstruck, and traces of an inscription, $\Lambda\text{E}\Lambda\text{I}\Lambda$ are visible on the left by the top of the caduceus, obscuring the I of the legend on left. No. 11 (b) is double-struck, so that a second profile appears on the obverse, while the caduceus appears to have three loops, and the last two letters of the legend are blurred. This puzzling inscription is probably to be resolved into two magistrates' names as often at Olbia (no. 16 below is a clear example), perhaps $\text{I}\alpha\delta(\mu\omega\nu?)$ and $\text{N} \dots$; the obvious division into $\text{I}\alpha$ and $\Delta\nu$ gives no possible second name.

12. *Obv.* Head of young Heracles l. in lion-skin; dotted circle; in cm. head of Athena r.

Rev. Two cornstalks, with ears, twined in a wreath; on r. upwards, $\text{O}\Lambda\text{B}\text{I}\text{O}$; on l. upwards, $\text{E}\Delta[\text{N}\text{I}]$.

\mathcal{A} \uparrow 20.5 mm., 112.7 gr. (7.30 grm.). Naville IV (1922), lot 500 = *Corpus*, Taf. X. 22. [PL. VII.]

13. *Obv.* The same die.

Rev. Similar, but on r. OABIO downwards; on l. upwards, TAIM .

$\mathcal{R} \uparrow 21.5$ mm., 101.9 gr. (6.60 grm.) as Burachov, T. IV, no. 44. [Pl. VII, rev.]

14. *Obv.* Similar head and cm.

Rev. Axe on l. and bow in case (*gorytus*) on r.; on r. and l. OABIO and $[\text{E}]\Delta\text{N}[1]$. As Burachov, T. IV. 36, which completes the legend.

(a) $\mathcal{R} \uparrow 19.0$ mm., 43.5 gr. (2.82 grm.). Mavrogordato Coll. [Pl. VII.]

(b) $\mathcal{R} \uparrow 17.5$ mm., 60.0 gr. (3.70 grm.) = *Corpus*, Taf. X. 23.

(c) $\mathcal{R} \uparrow 18.0$ mm., 60.6 gr. (3.83 grm.).

15. *Obv.* The same die and cm.

Rev. Similar, but on l. downwards, OA ; on r. upwards, ΦIEY .

$\mathcal{R} \uparrow 18.0$ mm., 55.6 gr. (3.60 grm.) as Burachov, T. IV. 38. [Pl. VII, rev.]

16. *Obv.* Similar, with same cm.

Rev. Similar, but on l. upwards, OABIO ; on r. \odot ? and \mathcal{R} .

$\mathcal{R} \uparrow 16.0$ mm., 37.8 gr. (2.45 grm.).

The wreath with the two corn-ears is, of course, the same as that with which Demeter binds her hair on nos. 1-4; the smaller coins, as is shown by the style and one common magistrate's name, belong to the same issue, and in spite of the irregular weight must be reckoned as halves. Less certain is the denomination of the following coin:

17. *Obv.* Similar head of Heracles r.; same cm.

Rev. Larger corn-wreath, within which $\text{O}[\wedge]\text{B}!$
 $\Sigma\text{M}\Delta$

$\mathcal{R} \uparrow 20.0$ mm., 72.9 gr. (4.72 grm.). Doguel Coll.

This may be intended to be the same denomination as the other coins with the wreath (nos. 12-13) but it looks more like a half of the reduced staters, such as no. 1. The reverse inscription (placed this time within the wreath) is unfortunately indistinct. The upper line appears, as is natural, to contain the ethnic, though the second letter is obliterated and the last is doubtful and might possibly be another B. The lower line at first sight suggests a date, but as this would be without parallel in the series it is most likely a collocation of magistrates' initials. Three separate initials occur commonly on the coins of the next series, and on one (no. 18) we find four, among which are ΔM as here. The same initials also occur on a bronze coin (*Corpus*, Taf. IX. 25).

18. *Obv.* Head of Heracles r., beardless, in lion-skin; two cms., radiate head r., and Athena head r.

Rev. Club l.; above, OABIO ; beneath, $\begin{matrix} \text{A} & \text{A} \\ \Delta & M \end{matrix}$

$\text{AR} \uparrow$ 23.0 mm., 123.4 gr. (8.00 grm.). Naville, IV (1922), lot 499. As Burachov, p. 49, no. 63. [Pl. VII.]

19. Similar. *Obv.* Same cmm. *Rev.* $\begin{matrix} \text{A} & \text{A} \\ \Delta & M \end{matrix}$.

$\text{AR} \uparrow$ 22.0 mm., 112.5 gr. (7.29 grm.). Mavrogordato Coll.

20. Similar. *Obv.* cm., Athena head r. *Rev.* $\text{A}_E \text{X}$.

As Burachov, T. IV. 39. (a) 22.0 mm, 145.3 gr. (9.42 grm.). Mavrogordato Coll. [Pl. VII.]

(b) 21.5 mm., 107.5 gr. (6.97 grm.).

21. *Obv.* Head of Apollo r., laureate; dotted circle; cm. Athena head r.

Rev. Lyre (*cithara*); above, OABIO ; on l. and r., $\text{A} \text{A}$

$\text{AR} \uparrow$ 17.5 mm., 50.1 gr. (3.25 grm.). As Burachov, T. V. 82-83. [Pl. VII.]

22. The same dies. *Obv.* Same cm. *Rev.* Δ^5 has been added below.

$\mathcal{R} \uparrow$ 17.0 mm., 53.0 gr. (3.43 grm.). [Pl. VII, *rev.*]

23. Similar. *Obv.* Same cm. *Rev.* $\Pi \Delta \Sigma$

$\mathcal{R} \uparrow$ 18.0 mm., 46.7 gr. (3.03 grm.). Doguel Coll. [Pl. VII.]

24. Similar. *Obv.* Better style; no cm. *Rev.* $\begin{matrix} \Pi & \Lambda \\ \Upsilon & \\ \odot & \end{matrix}$

Cp. Burachov, T. V. 81. (a) $\mathcal{R} \uparrow$ 17.5 mm., 51.8 gr. (3.36 grm.). Naville, IV (1922), lot 503 = *Corpus*, T. X. 25.

(b) $\mathcal{R} \uparrow$ 17.0 mm., 55.0 gr. (3.56 grm.). [Pl. VII.]

(c) $\mathcal{R} \uparrow$ 17.5 mm., 51.1 gr. (3.31 grm.). All from same *obv.* but different *rev.* dies.

25. Similar. *Obv.* No cm. *Rev.* $\begin{matrix} \Pi & \Lambda \\ \Upsilon & >E \end{matrix}$

As Burachov, T. V. 79-80.

(a) $\mathcal{R} \uparrow$ 17.0 mm., 75.8 gr. (4.91 grm.). Mavrogordato Coll. [Pl. VII, *rev.*]

(b) $\mathcal{R} \uparrow$ 18.0 mm., 46.0 gr. (2.98 grm.). [Pl. VII, *obv.*] From the same *obv.* but different *rev.* dies.

26. *Obv.* Head of Artemis r. laureate, the hair knotted behind; bow and quiver at shoulder.

Rev. Strung bow lying above quiver r.; above, $\begin{matrix} \Upsilon \Pi \\ \odot \end{matrix}$ below,

As Burachov, T. V. 86.

(a) $\mathcal{R} \uparrow$ 12.5 mm., 23.5 gr. (1.52 grm.). Naville, IV (1922), lot 504. [Pl. VII.]

(b) 13.0 mm., 20.2 gr. (1.31 grm.). Mavrogordato Coll.

⁵ The bottom of the Δ is off the flan but there is no cross-bar, and comparison with No. 19 makes Δ as against Λ most likely.

That the three classes of coins just described are three denominations of the same issue appears from the annexed table of magistrates, which combines all names contained in Burachov, the *Corpus*, and the British Museum.

<i>Heracles head.</i>	<i>Apollo head.</i>	<i>Artemis head.</i>
ΠΑΥ ΞΕ (Bur.)	Π Α Υ ΞΕ (B. M.)	—
ΠΥΑ Ο (Corp.)	Π Υ Α Ο (Bur.)	ΥΑΠ (B. M.) Ο
Π [Σ ?] Δ (B. M.)	Π Δ Σ (B. M.)	—
Φ Α Δ (Bur.)	{ Φ Α Δ (B. M.)	—
Α Χ Ε (B. M.)	Χ Α (Bur.)	—
Π ? ΛΞ (Corp. Bur.)	—	—
ΒΑ ΕΙΡΗ (B. M.)	ΒΑΕΙΡΗ (B. M.)	ΕΙΡΗ (B. M.)

The letters of the legend on no. 24 have been read together⁷ so as to yield a single magistrate's name Πυθα..., but comparison with the other coins of the series shows that we have to deal with at least two names, and, unless ΠΥΑ and ΥΑΠ are both blunders for ΠΑΥ, with three. Nos. 24 and 26 are so close in style that they must surely come from the same hand, and the style of certain coins of Chersonesus is so similar⁸ as to warrant the suggestion that they, too, are the work of this

⁶ Bronze: on the *obv.* of the smallest denomination the bow and quiver are absent.

⁷ e.g. in the Berlin Catalogue (*Beschreibung*, i, p. 18, no. 34).

⁸ e.g. *ibid.*, Pl. I. 6.

engraver. Though no trace of silver appears on the surface of any of the three denominations with the inscription *Ba Eipn*, it is hard to resist the conclusion that they also represent the same nominal values as the base silver coins recorded with them.

The progressive debasement of the currency visible in nos. 8-26 is a striking commentary on the decline of the city in the second century B.C., to which the illiteracy of the legends also bears witness, and which was due to changes in the movement of trade following on the conquests of Alexander, and to increasing pressure from Scythian and other tribes, culminating in the sack of the city early in the first century B.C.⁹

The weights of these base pieces are very irregular, but they seem to fall into three groups, more or less corresponding with the staters, thirds, and sixths of earlier issues. They are struck on flans which show not the rounded edge of the usual silver coinage, but the bevelled edge common to the true bronze coinage of the period. They are indeed sometimes indistinguishable from bronze coins in appearance, and it may be questioned whether all coins of certain types (e.g. those with Heracles and club) should not be regarded as of the same denomination and nominal value whatever their metallic content. The base silver coinage of Carthage in the late third century B.C. affords an exact parallel both in the bevelled fabric and in the degradation to an alloy indistinguishable from bronze. In any case, the base silver pieces cannot have been more than tokens passing at an official rate, the real basis of the currency being the gold

⁹ See Minns, *Scythians and Greeks*, pp. 460 seqq.

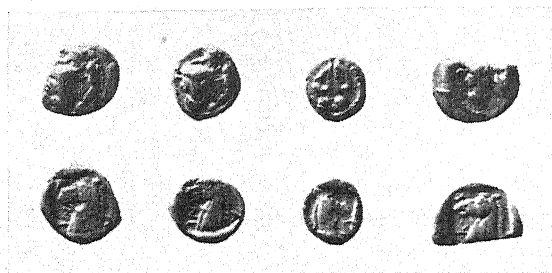
staters of Alexander and Lysimachus, mostly posthumous, so common in the Black Sea area at this period. In fact, we have a further development of the currency regulation which a famous inscription shows us to have been in force at Olbia as early as the fourth century.¹⁰

E. S. G. ROBINSON.

¹⁰ Minns *op. cit.*, p. 459; and pp. 460-461 for the use of gold.

VI.

PELINNA: AN EARLY THESSALIAN MINT.



1

1 A

2

3



1 (enlarged two diam.)

THE following previously unpublished Greek silver coins lately appeared in the Athenian market :

1. *Obv.* Bull's head and neck left, the head turned to front.
Above the bull's left horn, bearded head of a man left ; his left arm hangs across the bull's neck.

Rev. ΓΕ-Λ-ΙΝ Head of bridled horse left, all in incuse square.

↓↑ 0.84 g. (Aeginetic obol). Fig. 1.

2. *Obv.* Indistinct object (cicada or fly with two wings, eyes, &c.?).

Rev. Γ-Ε-ΛΙ Head of bridled horse right, all in incuse square.

↑→ 0.48 g. (Aeginetic hemiobol). Fig. 2.

There has long been an obol similar to no. 1 in the British Museum (Fig. 1A). F. Hermann in his recent article on the silver coins of Larissa also mentions an early obol of that town with a similar obverse but with Λ-A and a horse's head to right on the reverse.¹ Another obol of the same town shows only the bull's head without the man.² An obol similar to the latter was assigned to Scotussa by E. Babelon because of two indistinct letters on the reverse,³ but F. Hermann did not agree.⁴ A fourth coin (Fig. 3), much akin to the three others, but with obverse most like that of our coin, was published by Imhoof-Blumer.⁵ This is probably the obol mentioned but not illustrated by F. Hermann, *Zeitschr. f. Num.*, xxxiii (1922), p. 33, under Crannon. Imhoof-Blumer describes and shows quite clearly in his drawing of the obverse of this coin the bent arm of a man hanging over the bull's neck. In his description of the same unique obol of Crannon E. Babelon omits this detail, though he uses as his illustration in the text of the *Traité* a poor reproduction of Imhoof's drawing.⁶

Our obols, after more than sixty years, now prove that Imhoof-Blumer was right: on their obverse is represented, in a similar abbreviated form, the Thes-

¹ *Zeitschr. f. Num.*, xxxv (1925), Pl. I. 25.

² *Ibid.*, xxxiii (1922), Pl. I. 2; xxxv (1925), Pl. I. 20; *B.M.C. Thessaly*, Pl. IV. 7; Macdonald, *Hunter Coll.*, i, p. 451, 1; E. Babelon, *Traité*, ii, Pl. XLIII. 7; and others.

³ E. Babelon, *loc. cit.*, Pl. XLIII. 26, Texte p. 1031, no. 1440.

⁴ *Zeitschr. f. Num.*, xxxiii (1922), p. 34, note 2. Similar obols are found of Pharcadon and Pherae: Head, *H.N.*, p. 305 and 307; E. Babelon, *Traité*, iv, nos. 556 and 605.

⁵ *Ibid.*, i (1874), p. 97, Pl. III, no. IV.

⁶ *Traité*, ii, 1, Texte p. 1022, no. 1426.

salian *ταυροκαθάψια*,⁷ and, luckily, they are so well preserved as to show also the bull-fighter's head, which was broken away on Imhoof's obol.

But although our coin shows some relation to the above-mentioned obols of Larissa and Scotussa (?) and an even nearer one to Imhoof's piece of Crannon, it cannot be assigned to either of these towns because of the letters IN (or NI ?) and Λ on the reverse. Careful cleaning, however, brought to light a third stroke of the letter in the left upper corner of the incuse square, which proved it to be a Γ, and, at its right, a hardly visible Ε. So the legend reads ΓΕΛΙΝ, which undoubtedly indicates Pelinna, a town situated east of Tricca near the meeting-place of the Lethaios and Peneios rivers.⁸

The hemiobol, bought from a citizen of Larissa, has nearly the same reverse type, but with the horse's head turned to the right and without the last letter Ν of the inscription, for which there was no space on the very small die. Its obverse, on the other hand, shows quite a new and hitherto unknown Thessalian coin-type. I must confess that I cannot find a satisfying explanation for it, so my interpretation of this coarse but quite definite design as a fly or some other insect must remain a suggestion only ; others may point out a better one.⁹ Incidentally, an obverse type of a fly might have a connexion with the horse's head of the reverse ; such

⁷ See Pauly-Wissowa's *R. E.*, 1934 (Ziehen), where all information about these bull-fights is collected.

⁸ On the topography, surviving walls, and history of the town see F. Stählin, *Das hellenische Thessalien*, pp. 116-121.

⁹ Mr. E. S. G. Robinson kindly wrote me that the object looks "perhaps like some part of the body, an ear or something of the kind, or possibly a pair of leaves and fruit".

relations between obverse and reverse occur often in ancient coinages, as is well known. In our case one may remember the cicada above the horse on the obverse of some of the earliest coins of Larissa¹⁰ and may well think of the plague of these insects in Greece during the hot period of the year. The clearly legible inscription ΠΕΛΙ at all events makes certain our attribution to Pelinna.

Of this little town we so far knew only coins dating from the end of the fifth or the fourth century B.C. Gardner, Head, and Babelon have described them.¹¹ Consequently F. Hermann, like most of his predecessors, attributed the early drachms with ΠΕ¹² to the Perrhaebi¹³ of whom we also have contemporary obols of the bull's head—horse's head types reading ΠΕΡΑ (*B.M.C. Thessaly*, Pl. VIII. 11). Our new pieces with the clearly readable legend ΠΕΛΙΝ make this attribution doubtful again. They show that Pelinna also belonged to the Thessalian coin-league from the very beginning of its existence, using its ordinary federal coin types, and that consequently those drachms with ΠΕ may be assigned to Pelinna equally well as to the Perrhaebi. It is very probable that the striking of these types went on up till the second half and perhaps the end of the fifth century B.C., when the new coin-types of

¹⁰ Drachms of Persic standard. Cf. F. Hermann, *Zeitschr. f. Num.*, xxxv (1922), S. 5, no. 13; *B.M.C.* 1-2 (Pl. IV. 4-5).

¹¹ *B.M.C. Thessaly*, p. 38 (first period 450-400 B.C.); *Hist. Num.*, p. 303 (first period 400-344 B.C.); and *Traité*, iv, pp. 299 seqq. ("Fin du 5ième siècle").

¹² *Traité*, Pl. CCXCII. 19 and CCXCIII. 2; Hirsch, *Cat. XIII* (*Rhousopoulos*), Pl. XVIII. 1387; and others. The half-obol, *Traité*, Pl. CCXCIII. 3, is not mentioned by Hermann, *loc. cit.*

¹³ *Zeitschr. f. Num.*, xxxiii (1922), p. 34, and p. 35, note 1.

the town appeared.¹⁴ If F. Hermann's dating of the similar obols of Larissa to the beginning of the coinage of the league is right,¹⁵ our new pieces also must be dated between 479 and 465 B.C.; and to this time their late archaic style seems to belong.

Thus these two little coins show us Pelinna as another little-known Thessalian mint, which belonged to a northern Greek city-league at the very time that its name is mentioned in Pindar's songs.¹⁶

I have to thank the coin cabinet of Berlin for casts of Imhoof's obol of Crannon and Mr. E. S. G. Robinson of the British Museum for pointing out the second obol of Pelinna to me.

W. SCHWABACHER.

¹⁴ Cf. for instance the style of the drachm with ΠΕ, *Zeitschr. f. Num.*, xxxiii (1922), Pl. I. 7, dated by F. Hermann in his second period.

¹⁵ *Zeitschr. f. Num.*, xxxiii (1922), p. 36, and xxxv (1925), p. 25, Gruppe III A and B (Pl. I. 20 and 25).

¹⁶ Pyth. x, 4.

VII.
A LITRA OF ENTELLA.



(Enlarged two diam.)

Obv. Female head with ear-ring and necklace to right, hair bound up with band, border of dots.

Rev. **N** above a man-headed bull standing to right, border of dots.

Wt. 0.72 g. = 11 gr. Turin, R. Medagliere.

IMHOOF-BLUMER first called attention to this piece when he published it from his collection of casts¹ in an article "Zur Münzkunde Grossgriechenlands, Siziliens, Kretas, &c."² He attributed it without being positive to Neëton, or, if the reverse inscription was to be read from right to left, to Entella. Neither Head, who used this article of Imhoof's in the second edition of the *Historia*; nor Holm, *Geschichte Siziliens*, vol. iii; nor Hill, *Coins of Sicily*, mentions this piece. In an article,³ not easily accessible, my knowledge of which I owe to the kindness of the author, S. Mirone has recently dealt

¹ For the loan of Imhoof-Blumer's cast I have to express my heartiest thanks to Dr. Engeli of the Stadtbibliothek in Winterthur.

² *Wiener Num. Zeitschr.* (1886), xviii, p. 260, Pl. VII. 8.




³ "Una Litra di Nasso", *Miscellanea Numism.*, ii (Naples, 1921), no. 5.

with it. He attributes the coin to the town of Naxos, giving at some length his reasons, which we shall deal with later.

Everything, weight, style, types, and form of letters, of this coin point to Sicily. The obvious thing then would be to attribute it to Neëton, since no other town in Sicily begins with Ne-.⁴ The town of Neëton is first mentioned under the year 309/8 B.C. (Diod. xx. 32. 1, in the better manuscripts, instead of *Δεοντίου* we have *Νεατίου* and instead of *Δεοντίην* *Νεατίην* cf. Beloch, *Gr. Gesch.*, (1904) III. i. 199, note 1), when it was taken along with Camarina from the Syracusans during the siege of Carthage by Agathocles, but shortly afterwards captured by Xenodikos of Agrigentum and enrolled in the Agrigentine League. Later, in 263/2 we find it among the towns which, after the peace between Rome and Hiero II of Syracuse, were left to the latter (Diod. 23. 6). Under Roman rule it increased in importance, and during the Norman period in Sicily it was a considerable town under the name of Noto. The name varies between *Νέητον* (Ptol. iii. 4. 13), *Νέατον* (Diod. 23. 6), and *Νέατον* (Diod. xx. 32. 1). Mirone deduces from the fact that Neëton is not mentioned in connexion with events in the interior of Sicily in the fifth century that the town, in view of its insignificance, could not have struck coins at this time. We have other Sicilian towns issuing coins in the fifth century which find even less mention in

⁴ Neai, the birthplace of the Sikeli king Duketios, is only mentioned as such in Diod. xi. 88. 6. The passage is corrupt; cf. Freeman and Lupus, ii, pp. 524 ff., and V. Casagrandi, *Meneai, Menai, Menainon (Mineo) patria di Ducezio*, Acireale, 1895. Even if the place did exist, it need not be considered here on account of its insignificance.

classical literature, e.g. Hipana (once mentioned by Polybius, i. 24, under 258/7 B.C.), Longanon (Diod. 24. 7),⁵ Galaria, Nacone, Piacos, Stiella (these four only known from Steph. Byz. s.v.; the coins of Stiella have been dealt with by Mirone in *Z. f. N.* xxxviii (1928), p. 29). There is then nothing in theory against attributing our coin to Neëton. But the objection might be raised that the ancient Neëton did not stand on a river, which the man-headed bull must personify. We shall later see that the types of our litra better fit Entella.

The main argument brought by Mirone against the attribution to Neëton is another reading of the legend. He denies the existence of a second letter , which he says he has ascertained after a careful examination of the coin. As an explanation of Imhoof-Blumer's reading he says that the latter had only examined the coin in a "calco in gesso di cattiva esecuzione" and therefore could not observe minute details. Imhoof's plaster cast on which his reading was based and which is reproduced at the head of this article is an excellent and very clear one; it is impossible to miss anything on it, or read too much into it.⁶ Unfortunately Mirone does not tell us clearly whether he does not find any letter at all above the bull's head or whether he would read another letter instead of the . After a most minute examination we can see nothing except what Imhoof-Blumer read, namely, an , the left stroke

⁵ Is Longanon really identical with Longon, the castle of Catana mentioned by Diod. 24. 7? A more probable assumption would be that it is a town not known to us on the Sicilian river Longanos.

⁶ I have made several attempts to be allowed to see the original in Turin, but in vain. I have therefore had to be content with the cast.

of which rests on the neck of the bull, while the lowest right stroke lies above his head and the upper right stroke touches the border of dots (the middle right stroke is somewhat narrower).

As a result of this erroneous reading, or rather omission to read, Mirone considers it plausible to attribute the coin to Naxos, a proposal we can now at once reject, quite apart from the fact that neither style nor type connect it with this mint. Mirone thinks, it is true, that the head on the obverse represents Aphrodite, whose sanctuary in Naxos is mentioned by a number of writers:⁷ according to our sources, this sanctuary was a Sikel⁸ one and had probably nothing to do with the Greek city.

There remains as a last possibility Entella, as Imhoof had already suggested. If we examine the types of the coins of Entella, we see that our piece fits in very well with them. Before its capture by the Campanians in 404/3 B.C. this town struck litrae with a sacrificing female figure on the obverse and on the reverse a man-headed bull as on our coin. Some have retrograde inscription (*B.M.C., Sicily*, p. 60, 1, ΑΕΤΙΝΕ), on others (quoted by Imhoof, *loc. cit.*) the N only is reversed. Irregularities in the inscription are therefore frequent. The female head on our coin would then be that of the same female deity as is represented at full length on other coins; she is probably the eponymous heroine Entella who is said by tradition to have been the wife of Aigestes, the founder of the

⁷ App. *Emph.* V. 109: App. *Prov.* 1, 172. Schol. Luc. *Anacharsis*, 32. (Epicharm. fr. 103, *Lor. Non.* p. 118 (s.v. *gerrae*).)

⁸ i.e. originally Phoenician, as J. Bérard showed (*Mélanges Perrot*, p. 5).

town.⁹ Aigestes himself was the son of the river-god Crimisos and a daughter of the Trojan Phoinedamos. The Crimisos, on which Entella lay,¹⁰ on the basis of this legend, is therefore to be identified with the modern Belice Sinistro; the man-headed bull of our coin is then to be taken as Crimisos.

Stylistically also the bull type on our coins is closely related to the litrae of Entella. The head recalls many other East Sicilian issues, especially the didrachms of Segesta and Panormus: from the style it was struck before 450, probably about 460 B.C.

HERBERT A. CAHN.

⁹ Sil. It., xiv. 204; Tzetz. ad Lycophr. (Kinkel), 953, 964.

¹⁰ The site of the ancient Entella is still known as Rocca d'Entella (cf. the map in Holm, *Gesch. Siz.* II).

VIII.

THE *VOTA*-LEGENDS ON THE ROMAN COINAGE.

THERE are two well-known groups of $\text{Æ} 4$ *vota*-coins, one western, the earlier and heavier, struck for Gratian, Valentinian II, and Theodosius, the other, eastern, struck for the same three emperors and Arcadius. As at Siscia coins of the first group bearing the *vota*-numbers XV-XX, X-XX, and V-X are connected by distinctive mint-marks, it is an obvious inference that they were contemporaneous and that the numbers were appropriate at the moment of striking to Gratian, Valentinian II, and Theodosius respectively. This parallelism at Siscia leads Dr. F. Mayreder, the author of a paper in the *Numismatische Zeitschrift* on "*Vota*-legends in the time of Theodosius" to assert that all coins of this group from whatever mint striking them are similarly complementary to each other, and must therefore be dated to a time strictly limited by the appropriateness of the respective *vota*-numbers to the three emperors. Having laid down this law, he applies it to the later, eastern group and finds that it will fit only if the first five years of a reign, marked by the *vota*-numbers V-X, are compressed in the coinage into four, the commemoration of the next five years' vows X-XX starting with the beginning of the fifth year and going on—this time for the full five years—until succeeded by XV-XX at the beginning of the tenth year. We find in this eastern group three *vota*-legends,

XX-XXX predominatingly for Gratian, X-XX predominatingly for Valentinian II, and still more so for Theodosius, and V predominatingly for Arcadius, but all four emperors share in a greater or less degree in each of their colleagues' reverses, which are thus shown to be in concurrent use at a time dated to the seven months between the accession of Arcadius on 19 January 383 and the death of Gratian on 25 August 383. As on Dr. Mayreder's hypothesis they form a self-contained group, none can be earlier than January 383, when Arcadius came to the throne, and none later than the day on which X-XX would no longer be appropriate to Valentinian II, viz. 22 November 384 on Mayreder's interpretation of the *vota*-numbers. Whether or no we admit this strict limitation of date, we seem bound to accept the fact that Theodosius either struck no *vota*-coins specially appropriate to himself, which is unthinkable, or else, as is clearly indicated, that he struck for himself within his first *quinquennium* a number appropriate, as in the case of Valentinian II, to the second *quinquennium*. We must, I think, admit the certainty that Theodosius struck for himself X-XX at least a year before his first *quinquennium* was completed, and the possibility that this took place at the first celebration of the *Quinquennalia* at the beginning of the final year. Yet there is other evidence, which, so far as I can see, backs up the evidence from Julian's coinage and proves satisfactorily that V-X, in Theodosius' day also, was retained until the final celebration of the *Quinquennalia* at the completion of the fifth year.

There is a long series of "*Concordia-type*" *solidi* from Constantinople, covering the whole of the crucial year 383, in which Mayreder asserts that Theodosius

could no longer strike *vota*-coins for himself with V-X. The evidence from 80 coins struck in this year is as follows [A = any Greek *officina* letter A-1]:

A. *Between 19 January 383 and news of Gratian's death on 25 August.*

CONCORDI-A AVGGGG A (there are four Augusti).

1. Without *vota*.

Grat. 5. Val. II 7. Theod. 1. Arcad. 13.

2. With *vota* V-X.

Theod. 8. Arcad. 5.

Theodosius is paying the first instalment of his vows; Arcadius is taking his own.

B. *Between news of Gratian's death and 18 January 384.*

CONCORDI-A AVGGG A (there are now only three legitimate Augusti).

1. Without *vota*.

Val. II 9. Arcad. 17.

2. With *vota* V-X.

Theod. 16.

Whose are the *vota*? Are they of Theodosius, who alone has them and who is paying the final instalment of his vows, or of Arcadius, who has none and is now concerned neither with the taking nor the payment of vows?

In all these eighty *solidi* the throne on which the personified Constantinople is seated is ornamented with lions' heads. Subsequent issues of this type have a plain throne. Theodosius there appears with *vota* X-XV and MVL T for the hitherto all-prevailing MVL. This "plain throne" variety of the type is not found

for Gratian nor with the "four Augusti" legend and is clearly later. When, some years ago, I published my lists of the Valentinian I-Honorius coinage, I gave a "plain throne" coin of Valentinian II as reading **CONCORDI-A AVGGGG** without *officina* letter. This has mislead Mayreder into equating the "lions' heads" and "plain throne" varieties on the score of the four Augusti apparently indicated. This coin gave me some uneasiness from the first, but it was not until I began seriously to study the coinage that I realized that it would be a "monstrosity". Now, out of the other five coins of Valentinian II which I have noted of this "plain throne" issue, four have the *officina* letter **€**, the sixty-one corresponding coins of Theodosius and Arcadius have every *officina* letter **A** to **I** except **€**. Can there be any doubt that the letter I read as a fourth **G** is really an imperfect **€**? Instead of being a "monstrosity" the coin would now fall into line with some seventy others.

Such is the evidence—for whatever it is worth—from Theodosius' own coinage. I myself take it as proving as conclusively as coins can prove anything that Theodosius still struck **V-X** throughout the fifth year of his reign. The issue immediately after Gratian's death gives the *vota* to him alone and is indeed the only one in which his *vota*-legend is not shared by Arcadius.

My innocent belief that the five-year periods of the *vota*-legends corresponded to five-year periods of time was first based—as I thought, securely—on the evidence of Julian's coinage. I now learn from Dr. Mayreder that I was mistaken. Julian, he says, interchanged, as Augustus, his own **V-X** legend with the

XXX-XXXX legend of Constantius, who was then in his thirty-sixth year of rule. As the latter legend was hopelessly out of date, Mayreder concludes that the system of *vota*-reckoning, normal for the coinage of Valentinian I and his successors, had not yet been regularized and that therefore Julian cannot furnish us with useful evidence. Does this give us a fair picture of the Constantius-Julian coinage? Julian, who reigned eight years, has his V-X and X-XX legends. There is nothing wrong with these except that the V-X is continued for five years—a year longer than Dr. Mayreder approves. Constantius, who reigned thirty-seven years, has a regular series of *vota*-legends ending with XXXV-XXXX and XXXX alone. His *siliquae*, however, seem to end with XXX-XXXX, his *vota* XXXV-XXXX being represented in *R* by a (?) unique *argenteus* in Sir Arthur Evans's collection. This suggests to me, not that *siliquae* continued to be struck with the out-of-date legend XXX-XXXX while *solidi* were struck with appropriate *vota*-legend, but that Constantius issued such a vast quantity of *siliquae* in 353-354 as to render further issues unnecessary for some time. Their issue on a large scale was resumed by Julian as Augustus and with the *vota*-numbers V-X. The two or three hybrids by which Dr. Mayreder seeks to discredit this overwhelming evidence are in my opinion no more conclusive instances of the conventional exchange of *vota* between colleagues than is the *solidus* of Iovian with the *vota* XXX-XXXX reverse of Constantius. It seems proved by their coinage, then, that both Julian and Theodosius continue to strike their *vota*-numbers V-X to the end of their first *quinquennium*.

It is equally certain, I think, that in the Æ 4 eastern group Theodosius adopted for himself the *vota*-legend X-XX well in advance of the completion of his first *quinquennium*. Whatever the explanation of this, it will not be that given by Dr. Mayreder, viz. that in the time of Theodosius the change to the higher *vota*-numbers necessarily took place at the beginning of the fifth year. We shall not be able to use it to determine the upper limit of the whole group, which, according to Mayreder, started on 19 January 383, because only then would X-XX be appropriate to Theodosius. I suggest another explanation.

For decennial *vota* there was, Dio tells us, an unbroken tradition reaching back from his own date in the third century to Augustus. Was there any such pedigree for the quinquennial? If we look through the *vota*-coinage of the second and third centuries in "Mattingly and Sydenham" the decennial alone meet us, but almost from the first with a significant emphasis at a point about half-way through the *decennium*, which takes definite form later in the QVINQVENNALES POSTVMI AVG combined with VOT X of Postumus. In the fourth century the quinquennial gradually supplant the decennial vows on the coinage, though the latter were still, I think, theoretically the unit and still found expression in the common *vota*-legends with X-XX, XX-XXX, etc., in which the quinquennial division is ignored.¹ The *Quinquennalia*, then, which originated merely as a convenient break—a sort of "mi-Carême"—in the tedious wait for the festivities

¹ There are no "fives" on *vota*-coins of the first Tetrarchy, but the panegyrists of the period make allusion to the *Quinquennalia* as firmly established in practice.

of the *Decennalia* ended by ranking in importance with the *Decennalia* itself. The particular *Quinquennalia* commemorated would be appropriately numbered on the coinage, while coins without this special reference could express an emperor's standing by the more general reference to his *decennium*. In this way I should explain such coins as the *siliqua* with *vota XX-XXX* of Valens who died in his fifteenth year and the *X-XX* *Æ4* of Theodosius in the eastern group under discussion. In neither is an intervening "five" recognized.

If the evidence given above in the coinage of Julian and Theodosius is accepted at its face value as showing that a *quinquennium* counted on the coinage as a full five and not as four years, it is clear that Dr. Mayreder's explanation of these two last-mentioned coins cannot stand. But in a coin of Postumus which combines *VOT XX* with *TR P X* we have, indeed, an instance of new vows being commemorated within, and not at the expiration of, the tenth tribunate. Otherwise the evidence, when forthcoming, regularly connects them with the eleventh tribunate. It will be conveniently found in "Mattingly and Sydenham".

We are straying now from the fourth into the second and third centuries, but religious conservatism was strong with the Romans, and the question is numismatically important enough to warrant our calling in any evidence of earlier usage which may throw light upon the later. The only dated *vota*-coin of Septimius Severus has *VOT SVSC DEC TR P X*. Bearing in mind that Antoninus Pius when commemorating his second and third *Decennalia* particularizes them as e.g. *Soluta dec II* or *Suscepta dec III*, I feel no

doubt in my own mind that Severus is alluding to his first decennial vows which are still *suscepta* in his tenth, as much as were those of Marcus Aurelius in his fifth tribunate as Augustus. The vows, payment of which was begun at the beginning and ended at the end of the last year of the *decennium*, were, I suppose, repeated annually until fully paid. A vow can have only two stages in its life; it is *susceptum* until it is *solutum*, and if the payment is to be made in two instalments, the debt is not cancelled by the payment of the first instalment. Hence I cannot appreciate the force of Dr. Mayreder's *a priori* argument in favour of his dating—viz. that “*post-festum votu* are hardly ever popular”, and that the new vows were inscribed after payment of the first instalment of the old.

Some eminent authorities dissent from my views on the coin of Severus, holding, I suppose, that it is unnatural to describe *vota* as still *suscepta* nine years after they were originally taken. The following passage of an unknown orator (Paneg. Lat. V. 13. 2) is evidence on the same point for the year 311 but, like the coin of Severus, will be variously interpreted. The speaker is addressing Constantine at the completion of his first *Quinquennialia*. Constantine has just favoured the Aeduan by remitting arrears of the old, and lightening the burden of future, taxes.

Remarking how one short year stands as a boundary-line between the long anxieties of the past and the security of the immeasurable future, the speaker proceeds:—“*Quinquennialia tua nobis, etiam perfecta, celebranda sunt. Illa enim, quinto incipiente suscepta, omnibus populis iure communia; nobis haec propria, quae plena sunt.*” I take the contrast to be between

stages of the same quinquennialian *vota*. A mere year ago when they were *suscepta*, the anticipation of happiness to attend their fulfilment could be enjoyed by the whole empire, but the realization of that happiness is the special good fortune of the Aedui. The emphasis laid on the blessed change wrought by a single year seems lost if we take the contrast to be: "We Aeduans are the gainers by your *Quinquennalia*, but your *Decennalia*, vowed a year before these *Quinquennalia* were completed, may still hold some good in store for the rest of the world."

The evidence of the *Æ* "*Concordia*-type" series seems to me to be in itself sufficient ground for rejecting Dr. Mayreder's assertion that X-XX (or XV) must replace V-X on the *vota*-coinage at the end of four years.

He was led to this conclusion by the evident homogeneity of the whole eastern group in which four emperors and three *vota*-legends occur, each emperor sharing in greater or less degree in each of the legends. But though, no doubt, after the accession of Arcadius all these coins were being struck together, I cannot share Dr. Mayreder's certainty that they all originated together and that Theodosius waited for the accession of Arcadius to strike an *Æ*4 denomination which Gratian had initiated some years before. We know that for a time after Theodosius' accession Gratian's types were struck in the east as well as in the west, viz. his *Æ*2 REPARATIO REIPVB, *Æ*3 (distributed over the three emperors) VIRTVS ROMANORVM, VRBS ROMA, CONCORDIA AVGGG "Constantinople seated with hand on knee", *Æ*4 VOT XV MVLT XX, VOT X MVLT XX, VOT V MVLT X.

When Theodosius (?late in 380 after the meeting at Sirmium) started to strike his own distinctive eastern types, viz. $\text{Æ} 2$ *GLORIA ROMANORVM* (Emperor on ship) and $\text{Æ} 3$ *CONCORDIA AVGGG* (three varieties), did he deliberately reserve an $\text{Æ} 4$ till he could fit it in with the accession of Arcadius? We seem either compelled by Dr. Mayreder's canon to assume this or we must date the whole transition from western to eastern types to the accession of Arcadius. But Arcadius appears only at the very end of the prolific *CONCORDIA AVGGG* issue.

The assertion that in each $\text{Æ} 4$ *vota*-group all the coins are struck in accordance with a single uniform scheme whereby each emperor is represented with his appropriate *vota*-numbers, the whole group being rigidly confined to a period within which all the *vota*-numbers remain severally appropriate, is based on the Siscian mint-marks in the western group. Undoubtedly, I think, the identical mint-marks indicate that the *vota*-coins of the three emperors are contemporaneous—at Siscia. As in the eastern group the four emperors each have coins also with the *vota*-legends of each of his colleagues, this interchange is asserted by Dr. Mayreder to be an essential feature of the scheme under which both groups were issued.

Let us now see what evidence the western group as a whole offers in support of Dr. Mayreder's contention (1) that the emperors are represented simultaneously in sets of three, and (2) that each emperor is represented with the *vota*-numbers of each of his colleagues.

We must distinguish two periods in the Æ coinage of 379–383: a period before, and a period after, the

separation of the eastern from the western coinage, the eastern showing entirely new types (or varieties), the western partly carrying on the same, partly striking new, types (or varieties). It is with the new and purely western variety of the $\text{Æ} 3$ **CONCORDIA AVGGG** that the Siscian $\text{Æ} 4$ *vota*-series is connected by the identity of mint-mark with that which binds the *vota*-coins of the three emperors together as contemporaneous. Here Gratian's *vota* are unshared by either of his colleagues, Valentinian II's by Theodosius alone, Theodosius' by both Gratian and Valentinian. Besides Siscia, Aquileia alone has an attested example of X-XX and that is dated comparatively late by the divided obverse legend of Valentinian II, who shares the reverse with Theodosius. Not one single example of X-XX has been recorded for Gratian in this earlier western group. XV-XX and V-X both appear, and struck with the obverses of all three emperors, at Treveri (with the post-separation mint-mark SMTR), Rome, and Aquileia (with the earlier obverse of Valentinian II; his later divided obverse is not found with XV-XX but with X-XX and V-X). Lugdunum, Arelate, and Thessalonica strike only XV-XX, and for Gratian alone. The mint-marks of Lugdunum and Arelate being unvarying throughout this period, I do not venture to date their *vota*-issues; Lugdunum has no other Æ which can certainly be dated before the separation; Arelate struck both pre- and post-separation issues. The XV-XX of Thessalonica, however, seems by its mint-mark TES to go with the pre-separation types with that mint-mark, and not with those having SMTES, which is later, and, for all I yet know, may be entirely post-separation. Treveri has also an earlier

issue than the one mentioned above. It shows the pre-separation mint-mark TRP and its only known specimen is a V-X of Valentinian II IVN.

I cannot see in all this that there is strong evidence of a single uniform scheme. To me the evidence seems to point the other way.

To Dr. Mayreder's third and last conclusion, viz. that the western group with the earlier *vota* of Gratian came before the eastern group with his later *vota*, I give my fullest adherence. In fact, I myself stated this quite clearly on p. 106 of my book on the coinage of this period. But unfortunately on p. 3, writing on the custom of exchange of *vota*-numbers, I used the words "another issue at the same time". The heavier issue surviving into the reign of Maximus did indeed overlap the lighter issue which began in Gratian's lifetime, but, of course, they did not originate together. Perhaps Dr. Mayreder is justified in overlooking my p. 106 and correcting a rather loose expression on p. 3, but he is certainly carrying his passion for correction too far when he quotes from Gren's record of the Viminacium hoard Siscian mint-marks, which on all analogy belong to Gratian's own coinage, in order to prove that the transference of Siscia and Thessalonica to Theodosius took place during Gratian's lifetime, and not, as I, here following Alföldi, had argued, at his death.

J. W. E. PEARCE.

IX.

THE GREEK COINS FROM EXETER RECONSIDERED.

IN 1907 Sir George Macdonald and the late Professor Haverfield contributed to the *Numismatic Chronicle* (4th Series, vol. vii, pp. 145-55) a paper on "The Greek Coins at Exeter" in which they discussed and condemned the discoveries of Greek and Graeco-Roman Imperial coins alleged to have been made during the nineteenth century at Exeter. Not unnaturally the verdict of these two scholars, each an archaeologist as well as a numismatist, has been given widespread acceptance: even in the cautious pages of Pauly-Wissowa's *Real-Encyclopädie* (vol. xviii, 1914, col. 2056) a note on *Isca Dumnoniorum* concludes with the dogmatic statement that "Greek coins found there in large quantities at the beginning of the nineteenth century owe their origin not to the Roman period but to modern tricksters".

This conclusion does account for certain difficulties which might otherwise seem at first sight insuperable. Yet the occurrence of further discoveries of a similar nature during the thirty years subsequent to 1907, makes it desirable now not only to assess the new evidence, but also to point out one or two apparent weaknesses in the original condemnation.

The discoveries which the writers of 1907 had in mind comprised some 250 coins of a heterogeneous nature found on more than six different sites and occasions between 1810 and 1838, and published by

Shortt in 1841¹; also a single find of nine coins which occurred in 1878.² The evidence which has accumulated since 1907 is as follows:

- 1863. Tetradrachm of Trajanus Decius. Alexandria. Found under the Half-Moon Hotel. At present in the Exeter Museum—hitherto unpublished.
- 1931. Alexandrian bronze of Claudius; small bronze coin of Velia in Lucania (300–250 B.C.); ditto of Paestum in Lucania (2nd cent. B.C.); and an uncertain coin, probably also of Paestum. Found by the Exeter Excavation Committee among the ruins of a Roman structure in Smythen Street. Unstratified.³
- 1933. Potin tetradrachm of Diocletian. Alexandria. Found on Stepote Hill. At present in the Exeter Museum—hitherto unpublished.
- ? 1934. Potin tetradrachm of Numerian. Alexandria. Found in digging a sewer. At present in the writer's possession.

It need only be added that the 1931 discovery was made under proper archaeological supervision, whilst the other specimens were brought to the Museum by finders who were quite unaware of the nature of the coins and had nothing to gain from falsification.

These recent discoveries seem to justify a re-examination of the grounds on which the earlier ones were condemned. The discovery of 1878 was certainly made in convincing circumstances and recorded by a perfectly competent authority. Yet the writers of 1907 rejected it merely because of its unusual nature.

The main strength, however, of the 1907 argument lay in the supposed nature of the large deposit of Greek and Graeco-Roman coins found under High Street in

¹ Shortt, *Sylva Antiqua Iscana* (1841), pp. 93–101.

² *Transactions of the Devon Association*, x, 335.

³ *Proceedings of the Devon Archaeological Exploration Society*, i. 128.

1810. A parcel of 150 coins, said to be from this find, was in the Exeter Museum, and was re-examined in 1907 by the writers of the paper. Amongst a miscellaneous collection of genuine ancient coins were a few medieval specimens and—worst of all—two modern forgeries of Greek coins. Needless to say, this latter fact seemed to clinch the matter.

Yet Professor Haverfield and Sir George Macdonald do not appear to have inquired into the vicissitudes of these 150 coins during the century between their discovery and their re-examination. Had they done so, they would surely have hesitated before placing confidence in the testimony of a few exceptional specimens. For the High Street coins passed first into the hands of Alexander Jenkins, a noted local historian; then into those of his son who, in the words of Shortt,⁴ "takes great delight in numismatic researches, and has a noble collection"; and finally, descended to one William Norton, a local worthy whose collection numbered over 2000, and who presented it to the Exeter Museum. Circumstances could hardly have been more favourable for the intrusion of alien coins into an authentic find; and, like the coin of Arcadius from near Heddou-on-the-Wall which Mr. C. E. Stevens has recently examined,⁵ the dubious items among the genuine Greek coins from Exeter cannot justly be used as conclusive evidence in the determination of important issues. It is not, perhaps, without significance that whereas Shortt in 1841 described about 120 coins as from the High Street deposit, the number had increased to 150 by 1907.

⁴ Shortt, *op. cit.*, 90.

⁵ *Journal of Roman Studies*, xxvi (1936), p. 72.

The main object of this present paper is to suggest that Greek and Graeco-Roman coins have been found at Exeter in impeccable circumstances, rather than to put forward any hypothesis to account for the phenomenon. Nevertheless a plausible theory, such as that outlined below by Dr. Milne, will obviously do much to strengthen the case. It should be pointed out first of all that to accept as authentic the Exeter Greek coins does not necessarily entail trespassing on the dangerous ground of pre-Roman archaeology. Scanty as the evidence is, it suggests than even the earliest Greek coins could have been deposited in Roman times; such deposit, although uncommon, is certainly not unparalleled.⁶

Furthermore, Dr. Milne's remarks render void one of the most potent of the arguments of 1907. If, as he suggests, Alexandrian tetradrachms and other "foreign" coins reached Roman Exeter through the medium of sailors, and owe their deposit to their complete valuelessness, it need not be argued that: "It is inconceivable that Greek coins reached Exeter in connexion with Cornish tin, and never wandered outside its walls to the actual tin district."

Finally, three points may perhaps be mentioned. First, Exeter as cantonal capital of the Dumnonii and one of the finest ports of the south-west might well be the commercial centre of the tin trade. Second, it is interesting to note that the two largest deposits of Greek coins, those of 1810 and 1823, were both found in the area of the Roman city where the Forum might very

⁶ Cf. a recent find at Cobham, Surrey :—*Surrey Archaeological Collections*, xlv (1936), 139.

likely be situated.⁷ Third, as an example of Alexandrian coins reaching Britain in the course of trade, may be quoted the hoard of 46 specimens found in a pot in Fetter Lane, London, in 1908.⁸

The writer is indebted to Lt.-Col. L. A. D. Montague and Dr. Churchill-Blackie for information given, and especially to Mr. C. H. V. Sutherland and Dr. J. G. Milne for reading through his manuscript and making valuable suggestions.

R. G. GOODCHILD.

The evidence collected by Mr. Goodchild seems to justify his claim that the case of the Greek coins from Exeter requires reconsideration. The assemblage of coins at the Museum which was submitted to Professor Haverfield and Sir George Macdonald as the find of 1810 did not, as they noted, agree with Captain Shortt's lists, and some of those which they described correspond to coins stated by him to have been found elsewhere or at other times than in the Broadgate excavations of 1810. The most important of these stragglers, for the purposes of the argument, are the two "modern forgeries"; one of these is a type recorded by him from near Cheltenham, the other from Truro⁹: the mediaeval coins also do not appear in Shortt's 1810 list. It is true that his lists are rather confused, and

⁷ The results of recent research into the town-plan of Roman Exeter will be published in a forthcoming issue of the *Proceedings of the D. A. E. S.*

⁸ *Num. Chron.*, 4th Series, xi (1911), pp. 357-8. [Cf. also the hoard from Guernsey described in this volume pp. 135-138].

⁹ It is possible that the "modern forgeries" seen by Haverfield and Macdonald were casts made for Jenkins or Norton of the coins actually found at Cheltenham and Truro.

several of his attributions wrong—the latter a fault for which he can hardly be blamed, if the Exeter coins were in the same condition as the majority of the Greek coins found in this country—but they seem to give a trustworthy account of what he saw and what he could read, and on this evidence we may conclude that, if the collection was “salted”, the intrusion of alien coins took place at the Museum, or at any rate after his description of the finds was written. Unfortunately, no further “appeal to the coins themselves” can now be made, as the Museum authorities are unable to find them.

If we accept Shortt's lists as the basis for discussion the most noteworthy point is the composition of the three largest finds recorded: the occurrences of single coins do not matter much, as stray specimens from all parts of the Greek world, and especially from the Western Mediterranean, turn up in unquestionably Roman strata quite frequently in Southern and Central England, and occasionally in the North. The find in Broadgate in 1810 contained about 110 Greek coins and about 1,000 Roman: of the Greek 9 were Ptolemaic, 55 Alexandrian, and 35 Syrian, the rest various with 11 Byzantine. The Southgate find of 1833 had 1, 6, 3, and 2 of the same classes, likewise mixed with Roman; and the Poltimore find of 1838 had 3, 4, 10, and 3. It is important to notice that these finds were not only made at different times and in different localities, the last at a spot three miles out of Exeter, but were in different hands when seen by Shortt: the 1810 find seems to be the only one which reached the Museum.

The exceptional feature in the Exeter record is the proportion of Syrian issues: in all other respects

analogies can be found elsewhere in England. Since 1912 a list has been kept at the British Museum of finds of Greek coins made in this country which have been seen or verified by the authorities, and this now includes about 200 entries, for the most part isolated specimens, and often from places remote from the main Roman trade centres. About two-thirds of the coins identified are Ptolemaic or Alexandrian, the rest from various parts of the Greek world, with some preponderance of Sicilian; but there are only six Syrian. Byzantine coins have not been recorded, but they too turn up sporadically in England south of the Humber.

The circumstances under which these classes of coins came here probably differed. The Ptolemaic copper may have been brought in course of trade, not as money, but as metal: in the west at any rate it would have no currency, and anywhere outside Egypt its value as metal would be greater than its value in specie. The big copper pieces of the early Ptolemies are found at many ports of the Mediterranean, and sometimes inland: there seems a high degree of probability that they were exported from Egypt as metal, as Egyptian bronze coins were exported in the last century. Their occurrence in Britain is analogous to that of the Roman Republican bronze coins which are found sporadically: these would have no currency value in Britain before the Roman conquest, but would be appreciated as metal.

The Alexandrian coins, on the other hand, are not likely to have come over in course of trade. Most of the examples recorded are of the latter part of the third century A.D., when the metal value of the Alexandrian

tetradrachm was negligible, and it had no currency outside Egypt: in the Levant such coins might have been exchanged at a discount by merchants, but it is most unlikely that any one in Britain would have negotiated them. They were in fact absolutely worthless: they did not even look like coins, to people accustomed to the Roman issues: so when they drifted over here, and their owners realized that nothing could be done with them, they were simply thrown away. Several isolated examples of these tetradrachms have been shown to me as found at spots remote from any known Roman habitation or road. A like fate befalls a good deal of foreign coin to-day, if we may judge from the casual finds that are made, especially in country districts. To some extent the same considerations would apply to other Greek coins, particularly the Syrian issues; but at any rate under the Empire coins with the head of an Emperor which were of a *format* similar to the Roman would have a chance of passing, and this may explain why the Alexandrian *rejecta* outnumber all others in the lists. Also it is worth notice that in a few instances—the find recently published from Cobham is one—Greek autonomous coins were associated with fourth-century Roman: this suggests that there may have been in Britain a state of currency similar to that which existed at the same period in Egypt. Egyptian hoards of the fourth and fifth centuries frequently contain a few old coins of foreign origin, which indicates that a shortage of official currency caused any piece of metal to be taken as a coin: as the fifth century went on, the stringency grew and led to the production of an extensive local coinage, corresponding to the bar-

barous copies which circulated in the same century in England. Captain Shortt may have had personal experience in his youth of the effects of a similar dereliction of duty on the part of the Government, and was certainly justified in suggesting this as one explanation of the finds of Greek coins in Exeter.

As regards the Byzantine coins, there is nothing exceptional in the Exeter record. It would be natural that some amount of Byzantine money should have come over with the early Christian missions after the Saxon conquest, as well as with casual visitors and seamen. Byzantine gold coins are usually found in the vicinity of mission stations, but bronze is more widely scattered, presumably as being of no value.

The conditions under which the earlier finds at Exeter were made have not been recorded with sufficient detail to be of much service; but it is unlikely that any of the larger groups could be described as a hoard. The discoveries in 1810 were connected with excavations for a sewer, which went to a depth of twenty feet, and Shortt speaks as if coins were found at the lowest level: the 1823 find was made in the course of taking down a house, which is not likely to have involved so deep a trench: and it would seem that the coins were distributed over a considerable area and at different levels. In this case, the area was probably either a rubbish-tip, used for many years, or a market-place with large drainage-pits under it: if it were possible for a shaft to be sunk there under careful supervision, it might result in providing material for the solution of this problem. The occurrence of similar deposits outside the city at Poltimore, in what may be assumed to have been an agricultural

district, supports the "rubbish" theory: the use of city refuse as manure on farms was probably known to the Romans, and may well have been practised at Exeter. In any case, it seems most probable that the deposit of Greek, Roman, Byzantine, and other coins at Exeter has been formed by casual losses and deliberate rejections over a long period of time.

Under these circumstances, it is easy to realize how it came to pass that there was a larger accumulation of Greek coins at Exeter in the Roman period than anywhere else in Britain, so far as is known. Exeter would be one of the first ports of call for vessels coming from the Mediterranean, and sailors landing there might have miscellaneous coins from various countries in their purses, which they would try to pass off in the market: a junk-shop in almost any English port will produce such a gathering to-day. The chief conclusion that can be extracted from them is that Exeter was a very busy port for centuries: they have no direct business connexion with the tin trade, nor do they throw much light on the routes followed by the shipping that resorted to Exeter: the most that can be said is that there must have been a considerable through traffic with the Mediterranean, and that many of the ships that came had been in the Levant.¹⁰ It is quite likely

¹⁰ The clearest case of "through traffic" is in connexion with the 1878 find, which included six coins of Tomi and one of Nikopolis in Moesia. Such a group suggests that the former holder had been on shore in the neighbourhood of Tomi and had not had an opportunity of spending his spare cash till he got to Exeter. Incidentally this find provides strong evidence against the "salting" theory: no collector in England would be likely to have six coins of Tomi to spare for a practical joke. Another reason for transportation can be found in the occurrence of Imperial

that they called to take in cargoes of tin; but they would not pay for the tin in Greek coin.

It may be added that some of the Greek coins may have come as amulets; this would be most likely in the cases of coins with a representation of Alexander or some popular hero or local deity. There is contemporary evidence for the practice, and it has been traced both in Britain and elsewhere: not only genuine coins, but cast copies, were so used. If the coins were pierced, this explanation would almost certainly apply; but the records of the Exeter finds do not supply details of this kind.

J. G. MILNE.

bronze coins of the Peloponnesus in Syria, which M. Henri Seyrig discussed in *Syria*, xvii (1936), 174-6. These are all of the issues under Septimius Severus and Caracalla, and M. Seyrig makes the very probable suggestion that they were brought over by the "Spartan" battalions raised by Caracalla for the Parthian war. They would certainly get no commercial recognition in Syria, and no one would have brought them in the ordinary course of trade.

MISCELLANEA.

A HOARD OF ALEXANDRINE COINS FROM GUERNSEY.

SOME time before 1890 a hoard consisting of base "tetradrachms" of Alexandria of the late third century A.D. was unearthed at Jerbourg in Guernsey, and I am indebted to Sir Havilland de Sausmarez, the present owner, for permission to record it here. Individual Alexandrine coins, as the records kept in the British Museum for the past twenty-five years can show,¹ are found from time to time in this country under circumstances which leave no doubt that they travelled hither in ancient times, but the discovery of a hoard is something much more remarkable. The only other such hoard known hitherto is one now in the British Museum, which was unearthed in Fetter Lane in the City of London.² This is more miscellaneous than the present hoard, differing both in content (copper as well as billon) and in range (Nero-Carinus). The Jerbourg hoard, on the other hand, is remarkably homogeneous and covers a period of fifteen years only—the latest date being that of the year in which the local Alexandrine coinage ceased. We can only speculate on the purpose which lay behind so long a journey. Can it be that in such outlying districts of the Empire a coin was a coin, whatever its image and superscription,³ and tended to circulate as such; and that when, after A.D. 295, demonetization presumably deprived the local coinage of Alexandria of any value, traders brought such coins as these with the deliberate intention of discreetly slipping them into circulation? That such attempts were prevalent in the fourth century appears from the *Codex Theodosianus*;⁴ and the fact that they may not have been as successful as their authors wished, and left no decided mark on the contemporary currency of this

¹ Collected up to 1930 by Hill (*Num. Chron.*, 1930, p. 335).

² *Num. Chron.*, 1911, p. 357.

³ Cp. the numerous imitations (not forgeries) of Roman Imperial coins found in Britain.

⁴ *Codex. Theod.*, ix. 23. 1. I owe the reference to Mr. Mattingly.

country, affords no argument that they were not undertaken. The number of coins contained in the Jerbourg hoard were as follows:

Probus	4	Diocletian	34
Carus	3	Maximian	19
Carinus	4	Uncertain	1
Numerian	3		68

A list is appended:

Probus.

Obv. AKMAVΠPOBOCCEB (Milne, p. 108, A₁)⁵

1. *Rev.* Eagle l. L [€] (Milne, no. 4610)⁵ 2 ex.
2. *Rev.* Eagle r. L ^H (no. 4658).
3. *Rev.* Athena seated l. L ⁵ (no. 4617).

Carus.

Obv. AKMA KA POCCEB (p. 111, A₂).

4. *Rev.* Eagle r. with wreath and palm L A (no. 4672)
3 ex.

Carinus.

Obv. AKMAKA PINOCK (p. 111, A),

or AKMAKA PINOCCEB (p. 111, B).

5. *Obv.* A. *Rev.* Tyche l. A (no. 4667).
6. *Obv.* A. *Rev.* Eagle between vexilla A (no. 4679).
7. *Obv.* B. *Rev.* Elpis l. L B (no. 4701) 2 ex.

⁵ References to J. G. Milne, *Ashmolean Museum: Cat. of Alexandrian Coins*. The condition of the coins in their unclean state is such that it was not worth while to go into the minute differences in the arrangement of the bust and wreath. The references "no. 4610", &c. are to reverse types only and do not imply that the obverse of the coin is the same in all details, though, of course, it usually is.

Numerian.

Obv. AKMANOVMEPIANOCCEB (p. 111, B₁).

8. *Rev.* Athena seated l. L ^B (no. 4698).
9. *Rev.* Eagle between vexilla LB (no. 4711).
10. *Rev.* Nike r. ΕΤΟΥC Γ (no. 4739).

Diocletian.

Obv. AKΓOYAAΔIOKAHTIANOCCEB (p. 113, A₁);

or AKΓOYAAΔIOKAHTIANOCCEB (p. 113, A₂);

or ΔIOKAHTIANOCCEB (p. 113, B₁);

or ΔIOKAHTI ANOCCEB (p. 113, B₂).

11. *Obv.* A₁. *Rev.* Elpis l. Λ (no. 4750) 2 ex.
12. *Obv.* A₁. *Rev.* Eusebeia l. Λ (no. 4752).
13. *Obv.* A₂. *Rev.* Zeus standing l. Ξ? on l. star (cp. no. 4762).⁶
14. *Obv.* A₂. *Rev.* Dikaiosyne l. L ^B (no. 4770).
15. *Obv.* A₁. *Rev.* Eirene l. L B (no. 4774) 3 ex.
16. *Obv.* A₂. *Rev.* Eagle l. L ^B (no. 4787).
17. *Obv.* A₁. *Rev.* Nike r. ΕΤΟΥC Γ (no. 4815) 2 ex.
18. *Obv.* A₁. *Rev.* Tyche l. Ι (no. 4821).
19. *Obv.* A₂. *Rev.* Tyche l. Ι (no. 4821) 2 ex.
20. *Obv.* A₂. *Rev.* Eagle l. ΕΤΟΥC Γ (no. 4825) 2 ex.
21. *Obv.* A₂. *Rev.* Athena l. Δ (no. 4851) 2 ex.
22. *Obv.* A₂. *Rev.* Eagle between vexilla ΛΔ (no. 4891).
23. *Obv.* A₂. *Rev.* Eusebeia l. L € (no. 4896) 6 ex.
24. *Obv.* A₁. *Rev.* Alexandria l. L € (no. 4915).
25. *Obv.* A₁. *Rev.* Elpis l. L ς (no. 4937) 2 ex.
26. *Obv.* B₂. *Rev.* Zeus seated l. L ^Z (no. 4968) 2 ex.
27. *Obv.* B₁. *Rev.* Athena seated l. L A H (no. 5037).

⁶ Only the upright of the B is plain, but the obverse legend rules out Ι (= 10): this variety with star is Dattari, *Numi Augg. Alex.*, no. 5775.

28. *Obv.* B₂. *Rev.* Eirene l. L ^I (no. 5131).
 29. *Obv.* B₁. *Rev.* Elpis l. L ^{IA} (no. 5158).
 30. *Obv.* B₂. *Rev.* Elpis l. L ^I B (no. 5204).

Maximian.

- Obv.* AKMAOVAMAIIMIANOCCEB (p. 113, A₁);
 or AKMOVAMAIIMIANOCCEB (p. 113, A₂);
 or MAIIMIANOCCEB (p. 113, B₁);
 or MAIMI ANOCCEB (p. 113, B₂).
31. *Obv.* A₁. *Rev.* Eirene l. L ^A (no. 4777).
 32. *Obv.* A₁. *Rev.* Elpis l. L ^B (no. 4814) 4 ex.
 33. *Obv.* A₂. *Rev.* Elpis l. L ^B (no. 4814) 3 ex.
 34. *Obv.* A₂. *Rev.* Eagle l. L ^B star (no. 4848).
 35. *Obv.* A₁. *Rev.* Homonoia l. L ^Γ (no. 4855).
 36. *Obv.* A₁. *Rev.* Homonoia l. L ^Γ on l. star (no. 4855).
 37. *Obv.* A₁. *Rev.* Nike r. L ^Γ (no. 4881).
 38. *Obv.* A₁. *Rev.* Alexandria l. L ^Δ (no. 4904)
 ² ex.
 39. *Obv.* A₁. *Rev.* Eagle l. L ^Δ star (no. 4921).
 40. *Obv.* A₁. *Rev.* Dikaioisyne l. L [£] (no. 4922).
 41. *Obv.* B₁. *Rev.* Eagle l. L ^H (no. 5085).
 42. *Obv.* B₁. *Rev.* Elpis l. L ^I (no. 5162).
 43. *Obv.* B₂. *Rev.* Nike r. L ^{IA} (no. 5221).

Uncertain Emperor.

44. *Obv.* Imperial head. *Rev.* Obliterated. Late third-century billon tetradrachm of Alexandria. 20.0 mm.

E. S. G. ROBINSON.

THE ROMAN COINS FROM EXETER.

THE following list is an attempt at a collective study of the Roman coins found on the site of the Roman town of *Isca Dumnoniorum*. Every deep excavation within the city walls brings to light numerous Roman coins, and during the middle part of the nineteenth century when sewers, water- and gas-pipes were being laid, finds were particularly prolific.

After a fairly exhaustive search of bibliographical sources, 921 recorded specimens have come to the writer's notice. It is possible that there are numerous items recorded only in contemporary newspaper files, but it can be claimed that this list comprises not only the majority of recorded finds, but a good representative selection which can be relied on as giving the normal proportions.

There is not room for a full bibliographical list, but the following table shows the kinds of sources used:

1760-1831	27 coins recorded haphazard in local histories, &c.
1832-1841	581 coins recorded in two antiquarian books by Captain Shortt.
1842-1862	18 coins from various sources.
1863-1884	162 coins recorded by D'Urban, formerly Curator of the Exeter Museum.
1868-1935	111 coins, most of which are now preserved in the Exeter Museum.
1931-1933	22 coins found in the excavations of the Devon Archaeological Exploration Society.

It will be obvious from this table that the recording of coins has depended largely upon the energies of certain individuals during certain years, and that the figure 921 represents a mere fraction of the total number found between 1760 and 1935.

From the coin-list various omissions have been made, including amongst others such items as Graeco-Roman coins from autonomous mints, considerable quantities of which have turned up in Exeter; coins "probably" found in Exeter have also been excluded together with coins from hoards.

The resulting list, shown below, is interesting and in many ways suggestive, although the dangers which threaten

the veracity of a composite list of this sort must be borne in mind; such dangers include the tendency of recording antiquarians to ignore the smaller and less attractive specimens.

Owing to the vagueness with which these coins have frequently been recorded, it has been impossible to classify them according to metals and denominations. Furthermore, only in the cases of early and late emperors have the coins per emperor been shown separately; the emperors (and their families) between Marcus Aurelius and Magnentius have been divided into eight groups, based chronologically on the list of emperors in the Appendix of Professor Collingwood's *Archaeology of Roman Britain*. A small amount of overlapping cannot be avoided.

<i>Emperors.</i>	<i>Number of Coins.</i>
Republican and pre-Claudian	12
Claudius	70
Nero	68
Vespasian and Titus	63
Domitian	29
Nerva and Trajan	48
Hadrian	21
Antoninus Pius	36
Marcus Aurelius—Commodus	22
Septimius Severus—Macrinus	16
Elagabalus and Severus Alexander	9
Maximin Thrax—Volusianus	11
Valerianus—Macrianus	35
Victorinus—Numerianus	77
Diocletian—Licinius	67
Constantine I—Magnentius	250
Julian and Jovian	6
Valentinian I	29
Valens	23
Gratian	27
Valentinian II	1
Magnus Maximus	1
Later (none adequately recorded, see below)	
<i>Total</i>	<i>921</i>

This list speaks largely for itself, but two things may perhaps be pointed out. (1) The proportions of coins of Claudius and Nero are unusually high at Exeter. It is

difficult to believe that the civilian town was intensively occupied as early as A.D. 50-60, especially since it is doubtful whether there was a pre-Roman settlement on the site. A possible, if not probable, explanation is that Exeter was the site of a military outpost at the south-western end of Ostorius Scapula's Fosse-frontier, prior to its civilian life. (N.B.—One must make allowance for a fair proportion of Romano-British imitations among the "Claudian" coins; even so the numbers are remarkable.)

(2) The coin series ends much the same as that of Wroxeter, or any other fairly remote site. It should be noted that, although the above list ends with Valentinian II, four coins of Arcadius are said to have been found among the large deposits discovered in 1810 and 1823; there is no substantial reason to doubt the discovery, but, since the details are generally vague, both these finds have been excluded from the list.

It is to be hoped that the results obtained from the Exeter list may encourage the compilation of lists for such towns as Dorchester and Winchester. It is true that one cannot learn so much from the coins found over a long period of years and poorly recorded, as from those from a properly excavated open site. Nevertheless, the results thus obtainable might enable certain generalizations to be made.

R. G. GOODCHILD.

NEW PAPYRI OF NUMISMATIC INTEREST.

THE papyri continue to add to our literary material for the history of money in the Late Roman age, although we must admit that the new evidence is rather fragmentary. As a matter of fact the year 1936 has given us two texts, and if it had been possible to date them they would, I think, have proved of very great value for numismatists.

The first one, P. Brem. 83,¹ is a fragment of some accounts evidently belonging to public finance. As usual in the fourth century A.D. we find taxes assessed in raw metal, gold and silver, cf. Cod. Theod. xii. 7. 1; xiii. 2. 1; xi. 21. 1-3, P. Oxy. 1524, 1653, 2106, P. Thead. 33, P. Lips. 62, SB. 6086. Of the four column-headings preserved the first

¹ Wilcken, U., *Die Bremer Papyri*, *Abh. preuss. Ak. Wiss.*, 1936, phil.-hist. Kl. 2.

two contain income entries in gold and "asemon", i.e. silver, cf. for instance P. Oxy. 1288, 1524, 1653.² The value of metal is determined by weight-units. Columns iii and iv with the expenditure are of even greater interest. Column iii has three entries, the first of which comprises 1 lb. 3 oz. of gold, and the last has 37 lb. 2 oz. $1\frac{1}{2}$ scr. of silver. The second amount of expenditure was 111 solidi. But as all the calculating is done by weight-units, these solidi are reckoned at 1 lb. 5 oz. 20 scr. This is very curious, because 111 normal solidi of 4 scr. ought to weigh 1 lb. 6 oz. 12 scr. The average weight of these 111 solidi is consequently no more than 3.86 scr. Further in column iv we have two examples of the payment of only one solidus. The solidus is in both cases equal to $3\frac{1}{2}\frac{1}{3}\frac{1}{12}$ scr., i.e. $3\frac{11}{12} = 3.92$ scr. Lastly, lines 3-4 contain a payment of 10 s. = 1 oz. 15 scr., each solidus consequently weighing 3.9 scr.

The custom of accounting coined money by weight is by no means new to us. We have found it before in P. Oxy. 1653 (A.D. 306), SB. 6086 (fourth century). This form of calculating underweight is, however, new. As a matter of fact many solidi, considered as of full value in our collections have a slight deficiency of about the same amount as in our papyrus.³ It must be considered as very

² One wonders whether "asemon" in the fourth century really had the significance of "uncoined". A payment of 37 lb. of uncoined silver would have been rather inconvenient for the receiver. Possibly papyri will show that "asemon" or as in P. Brem. "asemon katharon", meant all pure silver in contrast to billon and white-copper. As a matter of fact the meaning "silver" for "asemon" is not known before the fourth century (Preisigke, *Wörterbuch*, cf. Johnson, A. C., *Am. Journ. of Arch.*, 1934, p. 51). It is not improbable therefore that "asemon" got this meaning in the time of debased coinage in the third century when there was no pure silver except the uncoined, although the billon coinage was still called "argyrian". It is not easy to understand why the Egyptians, after the restoration of silver coinage, should have made such a rigid difference between coined and uncoined pure silver. Certainly in the case of gold they did not. And thus I should not be surprised to see "asemon" include the pure silver coinage of Diocletian and the following rulers too.

³ The average weight of the solidi examined by Luschin v. Ebengreuth, *Der Denar der Lex Salica*, Sitzb. Wien, phil.-hist. Kl.

probable, indeed, that we have here the origin of the well-known custom of reckoning νομίσματα α παρὰ κεράτια γ in the fifth and sixth centuries.⁴

Another fragment from the fourth century published in the Harris Papyri, P. Harr. 97, is also of some interest.⁵ It contains some official accounts, mostly payments to craftsmen, &c. The lines 13 and 16 are, however, of greater interest for numismatists. They contain the following annotations:

l. 13 ἐπ(ἐρ) τι(μῆς) χρυσοῦ (τάλαντα) ἄνδ (δηνάρια) ψ

l. 16 τι(μῆ) ἀσήμου (τάλαντα) κα (δηνάρια) ψ

Unfortunately the quantities of purchased gold and silver are not stated in these lines. Their direct value is very limited therefore. They are interesting, however, because they illustrate money-changing in Egypt. The quantity of silver that is bought is extraordinarily small in comparison to the gold. But we must not forget all the same, that in P. Brem. 83, col. iii, the silver expenditure is more valuable than the corresponding gold entries. The main reason for making numismatists aware of this little text is, however, the fact that we find texts containing indications about metal value growing ever more numerous. Evidently the occasions for calculating the value of certain entries in another metal than the original were very numerous in the fourth century. It would be very strange indeed if we did not in the end get a dated text that would solve the controversies among numismatists on this matter.

GUNNAR MICKWITZ.

THE AUTONOMOUS SHEKELS OF TYRE.

MR. E. T. NEWELL has kindly called my attention to an error in my recent article in the *Quarterly* of the Department of Antiquities in Palestine,⁶ in which I dealt with the find of Jewish shekels at Jerusalem. There (p. 82) I said that the autonomous shekel-series of Tyre came to an end in

163, 1909, p. 63 ff. was 4.42 gr. — 3.89 scr. The bulk of the solidus weights lies between 3.87 and 3.94 scr.

⁴ See Kubitschek, *N.Z.* 1932, pp. 16–22, on this point.

⁵ Powell, J. E., *The Rendel Harris Papyri*, *N.Z.* 1932, pp. 16–22, Cambridge, 1936.

⁶ vi, pp. 78 ff.

A.D. 65/6, having been issued during a period of 181 years. The date should be 69/70, and the number of years 195. My statement was based on the heading given to the series in the *B.M. Catalogue of Phoenicia* (p. 233), which was inexcusably inaccurate, seeing that there is in that same Catalogue (p. 253, no. 245) a half-shekel of the year 195 = A.D. 69/70. The whole shekels may have stopped somewhat earlier, but not so early as I stated, since Mr. Newell has, he informs me, one of year 184 (from Rouvier's collection, but unpublished).

The issue, as Mr. Newell observes, was probably stopped by the Romans in 69/70. My slip does not affect the conclusions which I have drawn from the find, as to which it is a pleasure to be able to record Mr. Newell's opinion that it finally settles the question of the date of the Jewish shekels. The coins are to him obviously part of one hoard; and as to the Nablus find, such coins as he has seen which probably came from it are entirely different in appearance and date from the Tyrian shekels, and could not possibly have been found with them.

GEORGE HILL.

NOTES ON TWO HOARDS OF ROMAN COINS FROM CARRAWBURGH, NORTHUMBERLAND.

In his "Romano-British Notes" which appeared in the *Numismatic Chronicle*, 1933, pp. 81 ff., Dr. J. Grafton Milne dealt, *inter alia*, with certain coins in the Chesters Museum which had been found in the Roman fort of Procolitia (Carrawburgh) on Hadrian's Wall. The coins in question formed part of the Clayton collection, and were preserved in an old wrapping of paper inscribed "From Procolitia. 82 bas-Roman coins found July 1872, only one of Dioclesian to be made out." It is to be noted that the coins are not described as a hoard, although Dr. Milne deals with them as such; and the writer has always had doubts on this point, considering it much more probable that the coins were actually the miscellaneous pieces found during some casual excavation. He has advanced this opinion on more than one occasion when there seemed to be some tendency to use this "hoard" as evidence for the contemporary circulation of "barbarous radiates" and official coins of the late fourth century, and also in correspondence with

Mr. C. H. V. Sutherland ; and as the question has seemed to be worthy of further inquiry, these few notes have been prepared.

By the kindness of Capt. A. M. Keith, of the Chesters, the coins have been re-examined, and from their state it is almost certain that 82 of them, viz. those of Claudius II and Victorinus, the barbarous pieces, and the blank, do represent the whole or part of a hoard ; there is no reason to suppose that they were anything but part of one deposit, and must have been found in close association with each other. But it is otherwise with the coins of Diocletian, Tacitus, Valentinian, and Valens, which make up Dr. Milne's total of 87. Although the original wrapper states that only the Diocletianic coin can be made out, the *antoninianus* of Tacitus is equally legible, or more so ; and whereas the first-mentioned 82 "radiates" exhibit throughout a similar patina (if the word may be applied to pieces in so shabby a state), the others are clearly different. The coin of Tacitus is bluish and those of Valentinian and Valens a dark brown, and all are strongly in contrast with the corroded brassiness of the "radiates". With all deference to Dr. Milne's opinion, the writer suggests that the actual hoard only comprises the 82 which must certainly have been found together, and that the other coins may have been found at the same time but did not form part of the same deposit. Excepting, indeed, for the coin of Diocletian, there is no evidence that the other coins were found either at the same time or in the same part of the fort ; it is quite likely that they were afterwards added to the packet by a different hand and perhaps after a considerable lapse of time.

About the date mentioned (1872) considerable digging was being carried out on those parts of Hadrian's Wall which stood on the Clayton estates. The excavations were generally conducted on what may be termed a "treasure-hunting" basis, that is, greater importance was given to the finds than to the stratification thereof ; and there was also, it has been said, a certain amount of digging within forts and mile-castles for the purpose of recovering good worked stone for building. Probably this batch of coins was the fruit of such efforts, for the writer has not been able to trace that Mr. John Clayton reported their discovery at any of the meetings of the Society of Antiquaries of Newcastle-upon-Tyne, of which he was so active a member.

Another and earlier hoard from the same fort does not appear to have been published except, long after its discovery,

in the *Proceedings* of the same Society,¹ and as the description given there contains a larger proportion of errors than the state of the coins warrants, the writer gives below a corrected list which he prepared soon after the coins were presented to the Society in 1930.² The original account of the find was as follows:

"Mr. R. Blair (one of the secretaries) reported that in June 1875, while Mr. Tailford (who during a course of many years has made most of the discoveries in the camps, etc., on the line of the Roman Wall, belonging to the late Mr. John Clayton and his successors) was digging in the centre of the Roman camp of *Procolitia* he unearthed a hoard of 66 *denarii* ranging in date from M. Antony to Geta, the younger son of Septimius Severus. The coins were discovered under a large whin boulder. They were all attached one to the other by oxidation, evidence that they had been carefully hidden. One may fairly assume that their condition shews them to have been collected at one period as the oldest are the most worn, whilst those of Severus and his family are in comparatively fine condition. . . ."

Then follows a list of the coins, which, after being corrected, may be summarized thus:

M. Antony . . .	(5)	Cohen 32, and four others illegible.
Otho	(1)	Illegible.
Vitellius	(1)	Illegible.
Vespasian . . .	(3)	Mattingly & Sydenham no. 10, 107, and one illegible.
Antoninus Pius .	(1)	M. & S. 262.
Faustina II . . .	(2)	M. & S. 495 both.
Commodus . . .	(5)	M. & S. 208, 218, 222, 227, and 262.
Clodius Albinus .	(1)	C. 9.
Severus	(23)	C. 25, 37, 205, 210, 212, 390, 416, 417, 423 (two), 433, 471, 476 (two), 504, 517, 586, 592 (two), 606 (two), 641, and 741.

¹ *Proceedings of the Society of Antiquaries of Newcastle-upon-Tyne*, New Series, vol. x, 1902, pp. 161-164.

² *Ibid.*, Fourth Series, vol. iv, no. 11, p. 241.

Julia Domna . . . (8)	C. 27, 128, 156 (two), 198 (two), 246, and one uncertain.
Caracalla . . . (6)	C. 64, 413 (two), 424 (two), and 672.
Plautilla . . . (5)	C. 10 (two), and 25 (three).
Geta . . . (5)	C. 157, 159, 170, 206, and 219.

GILBERT ASKEW.

A TETRADRACHM OF ANTIOCHUS EPIPHANES
REISSUED BY ANTIOCHUS VI.



1

2

3

Obv. Head of Antiochus IV r., diad.; fillet border.

Rev. On r., ΒΑΣΙΛΕΩΣ; on l., ΑΝΤΙΟΧΟΥ ΕΠΙΦΑ-
ΝΟΥΣ; in ex., ΙΕΡ, ΠΡ; Zeus seated l. on throne,
holding in r. Victory, who is in the act of crowning
him with a wreath; in l. hand, sceptre.

Tetradrachm, 257.5 gr.; 16.69 grm.

Babelon, *Rois de Syrie*, p. 123, no. 986. (Fig. 2.)

The date $\text{I}\Sigma\text{P}$ (167 s.e. = 145 b.c.) places the issue of this coin in the first year of Antiochus VI. The portrait, however, is not that of Antiochus VI, who was only seven years old at the time of his accession (fig. 3), but is quite unmistakably that of Epiphanes (fig. 1). Also the rev. type is characteristic of the coinage of that monarch.

Although Babelon, in *Rois de Syrie*, describes this variety, he does not appear to notice anything remarkable in either the portraiture or the type.

That we have here a "Restored" issue of Epiphanes admits of little question, and as to its *raison d'être* I offer the following suggestion.

Antiochus VI was the son of Alexander Bala, a man of obscure origin, who usurped the crown of Syria in 152 b.c., pretending to be a son of Antiochus Epiphanes. In the prosecution of his claim he was greatly helped by a certain Heracleides who had been Treasurer to the late Epiphanes. Bala died in 146 b.c. and in the following year, the youthful Antiochus VI was brought forward by Tryphon, as a rival to Demetrius II, who had already assumed the Syrian crown, as successor to Bala. Under the patronage of Tryphon Antiochus VI secured the government of the greater part of Syria, but was murdered by him in 142 b.c.

The tetradrachms of Antiochus VI are always dated, but none bearing his portrait appear to have been struck in the year 145. It would seem, therefore, that the young king at the very beginning of his reign adopted the policy of issuing tetradrachms with the portrait and types of Antiochus Epiphanes in order to stress his fictitious claim to the Seleucid throne.

The monogram $\text{h}\rho$ cannot be explained certainly; but it is distinctly plausible to see in it an allusion to Heracleides who was mainly instrumental in bringing about the success of the usurper Bala. An allusion of this kind finds a ready parallel on coins of Antiochus VI, struck between 144 and 142 b.c., where we constantly find the name of Tryphon (abbreviated) (fig. 3).

E. A. SYDENHAM.

REVIEWS.

Die halben Centenionales mit Vota-Legenden zur Zeit des Theodosius. By DR. FRIEDRICH MAYREDER. *Numismatische Zeitschrift*, 1936, pp. 52-60.

In this attempt to date the two groups, Western and Eastern, of the "Theodosian" $\text{Æ}4$ *vota*-coins the author bases his results upon his discovery that in the time of Theodosius the change from lower to higher *vota*-numbers took place at the first celebration of the current vows, i.e. a full year before their completion. Thus a VOT V MVLT X coin of Theodosius must be dated within the four years between 19 January 379 and 18 January 383; a VOT X MVLT XX coin, on the other hand, within the five years between 19 January 383 and 18 January 388; and so on. The proof of this depends upon the validity of the author's second discovery, viz. that all coins of each group form a unity, being complementary parts of an issue in which each of the three emperors is represented with the *vota*-numbers applicable to him at the time of striking, the date of the whole issue falling within the limits imposed by the new rule given above. A corollary (not claimed altogether as a discovery, but merely as an improvement) is added, viz. that each emperor's *vota*-legend is struck also in combination with the obverse of each of his two colleagues. A third discovery is that the heavier Western issue, which includes Gratian's lower *vota*-figures, is earlier than the lighter Eastern issue, which includes higher *vota*-figures for him.

This third conclusion may be readily accepted, though the early $\text{Æ}4$ *vota*-coins of Maximus show that the heavier standard was still maintained in the West for some time after the introduction of the lighter standard in the East. The first two conclusions are arrived at only by straining the evidence available to the author to a point which it will not bear. The occurrence side by side at Siscia of coins of Gratian, Valentinian II, and Theodosius with their respective *vota* XV-XX , X-XX , and V-X , shown by the distinctive mint-marks to be contemporaneous, is no proof that the coins found for Gratian alone at Lugdunum, Arelate, and Thessalonica are part of the same uniform scheme. The Æ coinage of these mints is not rare like that of Treveri,

and complementary coins of the two other emperors would surely have been found if they had been struck. Has Dr. Mayreder made any attempt to date these $\mathcal{A}4$ *vota*-coins by reference to companion issues or has he rather dumped them all indiscriminately and uncritically within the arbitrary limits necessitated by his new dating of the *vota*-legends? At Siscia their issue took place after the separation between the Western and Eastern coinage, as also the issues at Aquileia with the broken obverse legend of Valentinian II and at Treveri with mint-mark SMTR. But those at Thessalonica with mint-mark TES, at Treveri with mint-mark TRP, and at Aquileia with Valentinian II's unbroken legend and IVN must be dated differently. The first two of these, at least, seem closely connected with an earlier stage of Gratian's coinage. Again, the concinnity observable at Siscia and assumed by the author for the whole of this first group is conspicuously absent in all the Gallic mints, from which there is not a single attested example of X-XX (the one quoted by Dr. Mayreder seems non-existent). This number X-XX, by the way, is extremely rare from any mint except Siscia. At Siscia itself Gratian's *vota*-legend is unshared by his colleagues, and he himself shares only in the V-X legend, and, apparently, for only a portion of the issue.

Yet it is on the evidence of uniformity here that the author postulates it also for the Eastern issue—a *non sequitur* in any case. And only by postulating this uniformity for the Eastern issue is the conclusion reached that the five-year period of the coin-legend corresponds to a four-year period in time at the beginning of a reign.

But, after all, has not Theodosius himself revealed his own usage of the *vota*-legends quite clearly? The crucial year January 383 to January 384 is covered from beginning to end by his \mathcal{A} "Concordia" type of *solidi* struck at Constantinople. At the beginning of the year, when Theodosius was paying the first instalment of his vows, and Arcadius was taking his own vows as a new Augustus, the coinage includes coins with VOT V MVL X for both Theodosius and—more rarely—Arcadius. At the end of the year, after Gratian's death, the issue is still going on without the slightest change except in the reduction of the number of the Augusti mentioned in the reverse legend. Theodosius is paying the final instalment of his first quinquennial *vota*. He alone is now concerned with *vota*, and his coins alone record them—VOT V MVL X.

The difficulties of explaining the early $\mathcal{A}4$ VOT X

MVLT XX of Theodosius and the *siliqua* VOT XX MVLT XXX CONCM of Valens, who did not complete his fifteenth year of rule, will have to be solved, it seems to me, in some other way than that laid down by Dr. Mayreder. A discussion of these and a fuller presentation of the evidence summarized here will be found on pp. 112 ff. This in its turn invites criticism.

J. W. E. PEARCE.

Note sulle Monete dell'Augusta Aelia Licinia Eudoxia. By OSCAR ULRICH-BANSA. Estratto dalla *Rivista Numismatica e Scienze Affini*.

The two Eudoxias, the elder, wife of Arcadius, and the younger, her grand-daughter, daughter of Theodosius II and wife of Valentinian III, are not by any means always obviously distinguishable in their coinage. Cohen gives two types only to the younger, both from Western mints, where the use of the fuller name renders confusion impossible. To these Laffranchi has lately added six in his article *Nuovo aureo di Licinia Eudoxia e il corpus numismatico di questa Augusta* (*Rassegna Numismatica*, Anno xxviii, N. 8). Our former Fellow, Col. Ulrich-Bansa, here reclaims yet another for her—the *siliqua* given by Sabatier (11) to the elder Eudoxia with *obv.* AEL EVDXIA AVG and *rev.*

“✱ in wreath” RV. Considerations of mint-mark, style, and the extension of the issue to include Placidia and Valentinian III make the new attribution certain.

Laffranchi's no. 7, an “unpublished” *siliqua* similar to the above but with *rev.* “Cross in wreath” CONS* should, Col. Ulrich-Bansa says, have mint-mark CON, as he shows by an illustration of the coin in his own collection from which Laffranchi's description is presumed to have been taken. By a happy coincidence, as I am writing this, Dr. Mayreder of Vienna informs me of a coin he has just acquired which in every respect agrees with Laffranchi's description. Evidently both mint-marks are found.

The author vigorously defends the empress from the charge of opening the gates of Rome to the Vandals to save herself from an insulting marriage with Petronius Maximus, the murderer of her worthless husband, Valentinian III. Genseric, after sacking the city, carried her and her two daughters over to Africa, where for seven years they were held in captivity. When at last in 462 Leo effected her

deliverance a period of deepest shame to the Roman world was ended.

The author makes a brilliant suggestion. The uncouth little coin of Leo (Sab. Pl. VII. 6) described as "Emperor, diademed, standing facing, holding sceptre and cross on globe" really, as the head-dress shows, represents not an emperor, but an empress. The mystic letters b | E in the field stand for "Basilissa Eudoxia". The evidence of the Dalmatian and other hoards allows us to date this issue approximately to the time of the restoration.

The humble Æ 4 thus acquires a medalllic significance of great historical interest.

J. W. E. PEARCE.

X.

NOTES ON THE OXFORD COLLECTIONS.

(3) IONIA.

[SEE PLATE VIII.]

THIS instalment of notes omits Colophon, with which I hope to deal separately; Priene, as all the necessary information has been published by Regling (in his lists of specimens, for "Milne" read "Oxford"); Smyrna, which I have previously discussed; and the silver of Teos, which requires special treatment. Minor varieties of published types have not been noted: but a few coins published by Wise have been republished, partly with the view of drawing attention to Wise's work. Publications in sale catalogues have been ignored, but a note has been made in cases where a coin comes from a well-known sale: coins from old collections also have their origin indicated. Notes have been reduced, except that, under Clazomenae, some suggestions as to dating have been given.

CLAZOMENAE.

1. Head of Athene r., wearing close-fitting crested helmet with floral ornament.

Ram's head r.: below, KA

Æ ↑, 11 mm., 1.21 g.

This little coin differs in details from *B.M.C., Ionia*, Pl. VI. 6 and *Babelon, Tr.*, Pl. CLVI. 10: it looks somewhat earlier than either, and might be dated to before 400: the reverse field is slightly sunk.

2. Head of Athene l., wearing close-fitting crested helmet with palmette decoration.

Ram's head r.: ab. \curvearrowright ΔΗΜΕΑΣ

Æ ↓, 12 mm., 1.20 g.

This coin seems to be slightly later than 1.

3. Head of Athene r., wearing crested helmet adorned with griffin r., ear-ring, and necklace.

Ram's head r.: ab. \curvearrowright Θ]ΕΟΦΙΛΗΤΟΣ

Æ ↓, 12 mm., 1.46 g.

This belongs to the series *B.M.C., Ionia*, 35-7, *Babelon, Tr.*, 2029, which may be dated 370-350.

4. Head of Athene to front, slightly r., wearing triple-crested helmet and necklace. [Cmk. \uparrow]

Ram walking r.: ab. on l. $\begin{matrix} [K] \Lambda \Lambda \text{IOME} \\ \text{NI} \Omega \text{N} \end{matrix}$, i. f. r. boar's head r.

Æ ↘, 17 mm., 4.05 g.

The countermark on the obverse is nearly always found on specimens of this series with the facing head and walking ram which have a symbol but no magistrate's name on the reverse—e.g. *B.M.C., Ionia*, 57-61. The series probably began about 350.

5. Head of Athene r., wearing crested Corinthian helmet.

Forepart of winged boar r.: ab. \succ ΚΛΑ

Æ ↑, 11 mm., 0.80 g.

This is probably the type of E. F. Weber sale 2758, but the legend is not mentioned in the sale catalogue.

6. Head of Athene r., wearing crested Corinthian helmet.

Ram recumbent r.: ab. on l. $\begin{matrix} \text{K} \Lambda \Lambda \text{IOME} \\ \text{NI} \Omega \text{N} \end{matrix}$, i. f. r. \uparrow

Æ ↑ (a) 17.5 mm., 3.84 g.; (b) 17 mm., 4.00 g.
(a) G. J. Chester

This is the type of E. F. Weber sale 2757. It is difficult to say whether the series to which this coin belongs (*B.M.C., Ionia*, 81-6) or that of 4 should be

regarded as the earlier in date: they may have been concurrent issues. The two specimens are from the same obverse die, but different reverses.

7. Head of Athene r., wearing crested Corinthian helmet adorned with griffin, ear-ring, and necklace.

Ram recumbent r.: ab. on l. KAAIOME , i. f. r. NIQN
serpent erect r.

Æ ↑ (a) 17.5 mm., 5.34 g.; (b) 17 mm., 4.71 g.
(a) G. J. Chester

The style of this coin suggests a slightly later date than that of the preceding type: possibly about 320. Both specimens are from the same dies.

8. Head of Apollo r., laur., hair long.

Forepart of ram r.: ab., KAA, bel. ✠

Æ ↑, 13 mm., 2.05 g.

This coin is earlier in style than those of similar types with a symbol or magistrate's name, such as *B.M.C., Ionia*, 47, *Babelon, Tr.*, 2024, *Imhoof, Kl. M.*, 23. It may be about 300.

9. Head of Apollo r., laur., hair long.

Ram walking r.: ab., KAA

Æ ↑, 12 mm., 2.18 g. (G. J. Chester)

10. Types as 9: legend KAA

Æ ↑, 11 mm., 1.14 g. (G. J. Chester)

11. Types as 9.

Æ ↑, 10 mm., 0.92 g.

12. Head of Apollo r., laur., hair in stiff curls.

Ram walking r.: ab., KAA, in ex. ✠

Æ ↑, 10 mm., 0.75 g.

The four specimens 9-12 have the same types, but differ considerably in date: 9 is certainly the earliest, perhaps about 280: 10 and 11 may be about 250: 12 may be just before 200. H. Weber 5764 is very similar to 12, but has no monogram.

13. Youthful male head r., diademed, drapery round neck: b. d.

ΚΛΑΖΟΜ ΞΕ ΝΙΩΝ Ram recumbent r., head l.: b. d.

Æ ↓, 15.5 mm., 3.50 g.

This is similar to H. Weber 5799, except that it has no caduceus in front of the head on the obverse.

Sept. Severus.

14. ΣΑΥΛΕΞΕ ΣΟΒΗΡΟΤΕΡ Head r., laur.

ΣΤΡΝΙΚΟ ΣΑΛΕΚΛΑ Cult-statue standing to front, wearing high crown with veil, long chiton with diplois, and peplos, hands hanging down by sides holding ends of peplos: at her feet, at either side, lion seated outwards, looking back.

Æ ↓, 19 mm., 3.50 g. (New College)

Caracalla.

15. ΣΑΥΤΚΜΑ ΣΒΑΝΤΩΝΕΙΝΟC Bust r., laur., back view.

ΣΕΠΙΣΤΡΑΑΥΡ. ΣΗΡΑΚΛΕΙΔΟΥ: i. f. ΚΑ Α|ΣΟ ΜΕ|ΝΙ ΩΝ Cult-statue as on 14.

Æ ↑, 32 mm., 12.06 g. [Pl. VIII. 1.] (Raye)

This coin was published by Wise in 1750, but his account has been overlooked.

EPHESUS.

1. Bee upwards, with curved wings: i. f. [E] Φ: b. d.

Square incuse with rough surface, quartered by cross-bands: on one band, ΣΚΥΘΗΣ

Æ ↑, 14 mm., 2.82 g.

A half-drachma of this series with the same magistrate's name has been noted, but cannot now be traced.

2. Bee upwards, with straight wings: i. f. Ε Φ: b. d.

Square incuse with rough surface, quartered by cross-bands: on one band, ΤΙΜΗΣΙΑΝ

Æ ↓, 11 mm., 1.58 g.

The half-drachma corresponding to the drachma *B.M.C., Ionia*, 20.

3. Cista mystica, with serpent issuing l. from under half-open lid: in wreath of ivy.

Bow-case, ornamented with aplustre, between two coiled serpents erect facing: i. f. l. ΕΦΕ and, ab., ΓΚ: between serpents' heads, bust of Helios to front, rad.: on r., long torch ↑

Æ ↑, 28 mm., 11.88 g. (O'Hagan sale)

4. Types as 3: on rev., date ΙΚ, between serpents' heads pilos with star over.

Æ ↑, 28 mm., 12.19 g.

5. Types as 3: on rev., ab. ∩[CS]EPTVMIOΤ.F.PRO-COS, bel. ∪ΤΑΥΡΕΑΣ: i. f. l. [Ε]ΦΕ and, ab., ΟΗ: between serpents' heads, two axes ↑ with blades inwards: to r., long torch ↑ and, ab., serpent staff ↑.

Æ ↑ 27.5 mm., 10.91 g. (Godwyn)

Compare Inv. Waddington 6980, where the name of the proconsul is not complete.

6. Bee upwards: i. f. Ε Φ

Stag kneeling l., head r.: above, astragalos: i. f. l. ↓ ΔΙΟΝΥΣ

Æ ↑, 13 mm., 1.97 g. (G. J. Chester)

7. Types as 6: on rev., i. f. l. ↓ ΘΕΜΙΣΤΑΓΟΡ[

Æ ↑, 15 mm., 2.55 g.

8. Types as 6: on rev., i. f. l. ↓ Ν]ΙΚΟΛΑΣ

Æ ↑, 15 mm., 2.55 g.

9. Types as 6: on rev., i. f. l. ↓ ΤΙΜΗΣΙΑΝ[

Æ ↑, 14 mm., 2.15 g.

10. Types as 6: on rev., i. f. l. ↓ ΑΥΚΩΝ

Æ ↑, 10 mm., 0.87 g.

11. Types as 6: on rev., i. f. l. ↓ ΙΩΝΟΣ

Æ ↓, 10 mm., 0.70 g.

12. Head of Arsinoe r., veiled.

Forepart of stag kneeling r., head l.: above, astragalos:
i. f. by neck AP ΣΙ, on r. ↓ [Α]ΠΙΣΤΑΓΟ[

Æ ↑, 12 mm., 1.94 g.

The larger denomination of this issue with the same magistrate's name is Imhoof, *A.G.M.*, 94.

13. Bee upwards: i. f. Ε Φ: b. d.

Stag kneeling l., head r.: above, quiver →: i. f. l.
↓ ΕΥΧΩΡΟΣ

Æ ↑, 14 mm., 1.98 g.

14. Bee upwards: i. f. Ε Φ: in wreath of laurel.

Stag feeding r.: above, quiver →: in ex. ΝΙΚΑΝ-
ΔΡΟΣ

Æ ↑, 17 mm., 3.98 g.

15. Bee upwards: i. f. Ε Φ: in wreath of laurel.

Stag standing r., head l.: above, quiver →: i. f. r.
↓ ΙΗΝΩΝ

Æ ↑, 13 mm., 1.83 g.

16. Types as 15: on rev., i. f. r. ↓ ΟΝΗΣΙΜΟΣ (cut over
.. ΠΕ ---- ?)

Æ ↑, 13 mm., 2.84 g.

17. Types as 15: on rev., i. f. r. ↓ ΣΚΑΜΑΝΔΡ[

Æ ↑, 12.5 mm., 1.85 g.

18. Bee upwards: i. f. Ε Φ: in wreath of laurel.

Head of stag r.: i. f. l. quiver →, r. ↓ [ΔΙΟ]ΝΥ-
ΣΙΟ[Σ]

Æ ↑, 9.5 mm., 0.86 g.

19. Bee upwards: i. f. Ε Φ: in wreath of laurel.


Stag standing r.: in background, palm-tree: in ex.,
ΠΟΣΙΔΩΝΙ
ΟΣ

Æ ↑ (a) 18 mm., 4.00 g. (b) 19.5 mm., 3.85 g.

((b) Raye)

Both specimens are from the same dies.

20. Bust of Artemis r., draped, wearing stephane, bow and quiver at shoulder: b. d.

Forepart of stag running r., head l.: i. f. l. torch ↑,
by neck E Φ, above , below MHNO ΦI
ΛOC

Æ ↑, 23.5 mm., 10.99 g. (Raye)


21. Bust of Artemis r., wearing stephane and necklace, bow and quiver at shoulder.

Bee upwards: i. f. E Φ

Æ ↑, 20.5 mm., 6.82 g.

This is overstruck on a coin the obverse type of which appears to have been a male head.

22. Bee upwards: i. f. E Φ: in wreath of laurel.

Stag standing r., head l.: in background, long torch ↑:
i. f. l., above, , r., below (a) Π, (b) Π: in ex.,
(a) [ME]NANΔ, (b) [M]ENAN

Æ ↑ (a) 13 mm., 2.70 g. (b) 13 mm., 3.25 g.
(a) Raye

The upper monogram does not agree with that given in Mi. S. vi. 121/287.


Augustus.

23. Head r., bare.

Cult-statue of Artemis to front, with high crown, fillets hanging from her hands: i. f. AP XI | EP
EYΣ | AΣ K Λ AΣ | E ΦE | EY ΦP | Ω N

Æ ↑, 16 mm., 3.72 g.


24. Head of Augustus, laur. and bust of Livia, draped, jugate r.

Stag standing r.: ab., quiver →: i. f. APTΕΜΙΔΩ
POΣ | E ΦE |  NEIT HΣ

Æ ↑, 20 mm., 7.41 g.

25. Types as 24: on rev., i. f. ΑΠΟΛΛΩ ΝΙΟΣ | ΕΦ Ε

Æ ↑, 20 mm., 7.20 g.

26. Types as 24: on rev., i. f. [ΓP]AMMAT EYΣ | APICΣT/
ΩN | E ΦE |  EPΩ N

Æ ↑, 20 mm., 5.65 g.

Tiberius.

27. Head r., laur.

ΣΑΡΧΙΕΡΕΩΣ → A Λ ΨΕΞΑΝΔΡΟΥ (inner) ΣΜΝ
 → A C ΨΕΑΣ Cult-statue of Artemis to front, with
 high crown, fillets hanging from hands: i. f. Ε Φ

Æ ↑, 18 mm., 4.88 g. (New College)

28. Types as 27: name in inner line on rev. ΣΤΑ → O C

Æ ↑, 17 mm., 3.00 g. (New College)

Nero.

29. ΨΝΕΡΩΝ ΣΚΑΙΣΑΡ Head r., laur.

ΣΑΟΥΙΟΛΑ ΣΑΝΘΥΠΑΤΩ Tetrastyle temple, viewed
 at angle, disk in pediment, acroterion over: i. f. Ε Φ,
 in ex. ΝΕΩΚΟΡΩΝ

Æ ↑, 26 mm., 10.12 g. (Raye)

Wise, p. 60, Pl. XIII. 2. There is no trace of the
 name ΑΙΧΜΟΚΑΗ on the reverse, as in the otherwise
 similar coin Mionnet, iii. 93/253.

Nerva.

30. ζ[] ΨΝΕΡΒΑCCEBACTOC Head r., laur.

ΣΑΡΤΕΜΙC ΨΕΦΕCΙΑ Cult-statue of Artemis to
 front, with high crown, fillets hanging from hands.

Æ ↑, 26 mm., 9.60 g.

Antoninus Pius.

31. ΣΤΑΙΚΑΙ ΨΑΝΤΩΝΕΙΝ -- Head r., laur.

ΣΔΙC ΨΝΕΩΚ (ex.) ΨΦΞCΙΩΝ Cult-statue of Artemis
 to front, with high crown, fillets hanging from hands.

Æ ↓, 19 mm., 3.78 g.

32. ΨΑΝΤΩΝΕΙΝ [OC] ΣΚΑΙCΑΡ Head r., laur.

ΣΕΦΕCΙ ΨΩΝ Tyche standing l., crowned with
 modius, wearing long chiton and peplos, holding in
 r. rudder, in l. cornucopiae.

Æ ↓, 25 mm., 8.25 g.

Commodus.

33. $\Sigma\text{AVKAIK} \Sigma\text{OMO}\Delta\text{OC}$ Head r., laur.

Artemis standing r., wearing short chiton, drawing arrow from quiver and holding bow, in car drawn

by two stags galloping r.: i. f. $\epsilon\phi$
 $\epsilon\zeta$, in ex. $\text{I}\Omega\text{N}$

\AA \downarrow , 18 mm., 4.27 g.

Sept. Severus.

34. $\Sigma\text{AVT}\cdot\text{K}\cdot\text{A}\cdot\text{CE} \Sigma\text{CEOYHPOC}$ Head r., laur.

(a) $\zeta\epsilon\phi\epsilon\zeta\text{I} \Sigma\Omega\text{N}\cdot\text{B}$ (ex.) $\text{NE}\Omega\text{KO}$ (b) $\zeta\epsilon\phi\epsilon\zeta\text{I}\Omega$
 $\text{P}\Omega\text{N}$

$\Sigma\text{NBNE O}$ (ex.) $\text{KOP}\Omega\text{N}$ Cult-statue of Artemis to front, with high crown, fillets hanging from hands: on r. star, on l. crescent: below, two naked children, r. and l., facing, kneeling and playing with astragaloi.

\AA \downarrow (a) 23 mm., 5.92 g. (b) 22 mm., 6.01 g.

(b) Raye

This is probably the type described by Mionnet, S. vi. 154/489, from Mus. Sancel.: Wise's description, p. 72, of (b) is more correct.

35. $\zeta\text{CEOYHPOC} \Sigma\text{PEIOCAV}\Gamma$ Head r., laur.

$\zeta\epsilon\phi\epsilon\zeta\text{I}\Omega\text{NB} \Sigma\text{N} \epsilon\text{OKOP}\Omega\text{N}$ Tyche standing l., crowned with modius, wearing long chiton and peplos, holding in r. rudder, in l. cornucopiae.

\AA \downarrow , 22 mm., 4.81 g.

36. Types as 35: obv. leg. $\Sigma\text{AVTKAICE} \Sigma\text{CEOYHPOC}$

\AA \downarrow , 22.5 mm., 6.30 g.

37. Types as 35: obv. leg. $\Sigma\text{AVTKAICE} \Sigma\text{CEOYHPOC}$,
rev. $\zeta\epsilon\phi\epsilon\zeta\text{I}\Omega\text{NB} \Sigma\text{NEOKOP}\Omega\text{N}$

\AA \downarrow , 23 mm., 7.09 g.

The three last described differ from Mi. iii. 106/339 in having B in the neocorate title.

Julia Domna.

38. $\zeta\text{CEBACTHIOY} \Sigma\text{AIA}\cdot\Delta\text{OMNA}$ Bust r., draped.

$\zeta\epsilon\phi\epsilon\zeta\text{I}\Omega \text{N} \Sigma\Delta \text{ICNEOKO}$ (inside) $\Sigma\text{P}\Omega\text{N}$ Leto

running r., looking back, wearing long chiton with diplois, holding on each arm one of her children.

Æ ↓, 31 mm., 13.13 g.

Caracalla.

39. ζΑΝΤΩ ΨΝΕΙΝΟC Bust r., laur., back view.

ζεφε ρχιων Artemis standing to front, head r., wearing short chiton, drawing arrow from quiver with r., holding bow in l.: in background, tree.

Æ ↓, 17.5 mm., 2.93 g.

Diadumenian.

40. ϙΟΠΕΛΔΙΑΔΟ ΨΥΜΕΝΙΑΝΟCΚΑΙ Bust r., bare-headed, back view.

ϙεφεσι (ex.) ΩΝ Boar, transfixd by spear, running r.

Æ ↓, 18 mm., 3.10 g.

Elagabalus.

41. ζΑΝΤΩΝ ΨΕΙΝΟCΑΥΓ Bust r., laur., back view.

ζεφε ρχιων Cult-statue of Artemis standing to front, with high crown, fillets hanging from hands.

Æ ↓, 18 mm., 2.55 g.

42. ζΑΝΤΩΝ ΨΕΙΝΟCΑΥΓ Bust r., laur., back view.

Artemis standing r., wearing short chiton, drawing arrow from quiver and holding bow, in chariot

drawn by two stags galloping r.: i. f. bel. $\begin{matrix} \epsilon \\ \phi\epsilon\varsigma \\ \iota\omega\eta\end{matrix}$

Æ ↓, 16.5 mm., 2.11 g.

43. ζΑΥΤΚΜΑΥΡΑΝ ΨΤΩΝΕΙΝΟC Bust r., laur., back view.

Two agonistic crowns, with palms in them, standing side by side on table, with staff ↑ between: i. f. ab. A, bel. $\epsilon\phi\epsilon\varsigma\iota\omega\eta|\Delta\eta\epsilon\omega|\kappa\omicron\rho\omega\eta$: on edge of table, $\omicron|\kappa\omicron\upsilon\mu\epsilon\eta|\kappa\alpha$

Æ ↓, 30 mm., 12.63 g. [Pl. VIII. 2.] (Nourse)

Published by Wise, p. 65, Pl. XIII. 13, who missed the inscription on the table.

44. $\zeta\text{ΑΝΤΩΝΕ ΝΙΝΟCΑΥΓ}$ Bust r., laur., back view.

$\zeta\epsilon\phi\epsilon \nu\zeta\iota\omega\text{N}$ Distyle shrine: within, cult-statue of Artemis to front, with high crown, fillets hanging from hands.

Æ ↓, 17 mm., 2.54 g.

Julia Paula.

45. $\zeta\text{ΚΟΡΝΗΛΙΑ ΝΠΑΥΛΑCΕΒΑCΤΗ}$ Bust r., draped.

$\nu\zeta\epsilon\phi\epsilon\iota\omega\text{N}\Delta\text{N}\epsilon\omega\text{KOPON}$ Nike advancing l., wearing long chiton, holding in r. wreath over cult-statue of Artemis standing to front, with high crown, fillets hanging from hands.

Æ ↓, 28.5 mm., 9.72 g. (New College)

The reading of the reverse legend in Mi. iii. 113/384, which is otherwise similar, is given as $\text{—ΓN}\epsilon\omega\text{KO—PON}$

Severus Alexander.

46. $\varrho\text{ΑΛΞΑ ΝΔΡΟCΑΥΓ}$ Bust r., laur., back view.

$\zeta\epsilon\phi\epsilon \nu\zeta\iota\omega\text{N}$ Cult-statue of Artemis to front, with high crown, fillets hanging from hands: i. f., ab., on r. crescent, on l. star.

Æ ↓, 16.5 mm., 2.08 g.

47. $\zeta\text{M·AYP·CΕV ΝΗ·ΑΛΞΑΝΔΡΟC}$ Bust r., laur., back view.

$\zeta\epsilon\phi \nu\zeta\epsilon\iota\omega\text{N}$ Artemis r., wearing short chiton and peplos, seizing with both hands horns of stag falling r., and placing l. knee on its back.

Æ ↓, 22 mm., 4.33 g.

48. $\varrho\text{·M·AVP·ΑΛΞΑΝΔΡΟC·K·}$ Bust r., bareheaded, back view.

$\zeta\epsilon\phi\epsilon\iota \omega \nu \text{N} \Delta\text{N}\epsilon\omega$ (ex.) KOPON Tetrastyle temple-front: within, cult-statue of Artemis to front, with high crown, fillets hanging from hands, star on l, crescent on r.

Æ ↓, 21 mm., 5.49 g.

Maximinus.

- 49.
- $\Sigma\Gamma\text{IOYOV}\ \Sigma\text{MA}\Sigma\text{IMEINOC}$
- Bust r., laur., back view.

(a) $\Sigma\text{E}\Phi\text{ECI}\Omega\text{NF}\cdot\ \Sigma\text{N}\ \text{EOKOP}\Omega$ (ins.) N (b) $\Sigma\text{E}\Phi\text{E}\cdot\text{CI}\Omega\text{NF}\cdot\ \Sigma\text{NE}\ \text{OKOP}\Omega\text{N}$ Artemis standing to front, head r., wearing long chiton, quiver at shoulder, holding in both hands long torch transversely.

Æ ↓ (a) 22 mm., 5.10 g. (b) 22.5 mm., 5.91 g.

Both coins are from the same obverse die.

Gordian III.

- 50.
- $\text{QAVT}\cdot\text{K}\cdot\text{M}\cdot\text{ANT}\cdot\text{GOR}\Delta\text{IANOC}$
- Bust r., laur., wearing cuirass and cloak.

$\Sigma\text{E}\Phi\text{ECI}\Omega\text{N}\cdot\Gamma\ \text{N}\ \Sigma\text{EOKOP}\Omega\text{NAN}\Delta\text{POKA}$ (ins.) ΣOC Androklos walking r., chlamys over l. shoulder, holding in r. patera, in l. spear over shoulder: at his feet, boar running r.: to l., tree.

Æ ↓, 31 mm., 12.28 g.

- 51.
- $\text{QAVT}\cdot\text{K}\cdot\text{M}\cdot\text{ANT}\cdot\text{GOR}\Delta\text{IANOC}$
- Bust r., laur., back view.

$\Sigma\text{GOR}\Delta\text{IANOV}\Delta\text{IK}\ \Sigma\text{AIO}\ \text{CVNH}\text{E}\Phi\text{ECI}\Omega\text{N}$ Dikaio-syne standing l., crowned with modius, wearing long chiton and peplos, holding in r. scales, in l. cornucopiae.

Æ ↓, 30 mm., 9.37 g. [Pl. VIII. 4.] (Raye)

Published by Wise, p. 66.

- 52.
- $\text{QAVT}\cdot\text{K}\cdot\text{M}\cdot\text{ANT}\ \Sigma\Omega\cdot\text{GOR}\Delta\text{IANOC}$
- Bust r., laur., wearing cuirass and cloak.

$\Sigma\text{OM}\ \text{O}\ \text{NOIA}$ (ex.) $\text{E}\Phi\text{ECI}\Omega\text{NKAA}\ |\ \text{E}\Sigma\text{AN}\Delta\text{PE}\Omega\text{N}$ Two river-gods seated facing, Kaystros (?) r., holding in r. reed, on l. statue of Artemis to front, and Nilus l., holding on r. statue of Isis to front, in l. cornucopiae: both with drapery over legs.

Æ ↓, 37.5 mm., 22.03 g. [Pl. VIII. 3.]

Gallienus.

- 53.
- $\text{QAVTKBAKAIPOCTAAHNOC}$
- Bust r., laur., back view.

$\text{QE}\Phi\text{ECI}\Omega\text{MI}\Delta\text{IOKOP}$

€

Cult-statue of Artemis to front, with high crown, fillets hanging from hands.

Æ ↓, 17.5 mm., 2.80 g.

The letters BA in the blundered obverse legend are cut over AI, apparently.

54. $\text{QAVTKPOLIKIGALLIHNOC}$ Bust r., laur., wearing cuirass and cloak.

$\text{CEPECIONΓ ANEOKOPON}$ Artemis standing to front, head r., wearing short chiton, quiver at shoulder, raising r. hand to head, holding bow in l.: behind, on r., tree: at her feet l., stag standing l., head r.

Æ ↓, 26 mm., 7.57 g.

Salonina.

55. $\text{C A A \Omega ANEINA}$ Bust l., wearing stephane, draped.

$\text{Q E \Phi E C I \Omega N \Gamma}$ Bee upwards.

Æ ↓, 19.5 mm., 2.83 g.

56. $\text{C A A \Omega XPVC \Omega OΓONHC}$ Bust r., wearing stephane, draped [O cmk., eagle r., head l.]

$\text{\Omega OLVMP I A \Omega PVΘIA (ex.) EPECION}$ Prize-crown on four-legged table.

Æ ↓, 25.5 mm., 6.36 g.

Valerian jr.

57. $\text{C KOPOVA A \Omega EP I ANOC}$ Bust r., laur., back view.

$\text{CEPECI \Omega AN TVXH}$ Tyche standing l., crowned with modius, wearing long chiton and peplos, holding on r. cult-statue of Artemis to front, in l. cornucopiae.

Æ ↓, 20.5 mm., 3.99 g.

This may be the type of Mi. S. vi. 883: compare Hunter Cat. ii. 340. 93.

Saloninus.


58. $\text{C A A \Omega NOVA \Omega EP I ANON}$ Bust r., laur., back view.

$\text{CEPEC I \Omega N TVXH}$ Tyche standing l., crowned with modius, wearing long chiton and peplos, holding on r. cult-statue of Artemis to front, in l. cornucopiae.

Æ ↓, 21 mm., 4.89 g.

ERYTHRAE.

1. Head of Herakles r., beardless, wearing lion's skin.
(l. to r.) \uparrow EPY and, above, owl r.; club \uparrow : \uparrow EYΘY-
NOYΣ: bow in case \uparrow
Æ \uparrow , 16 mm., 3.46 g.
2. Head of Herakles r., beardless, wearing lion's skin:
b. d.
(l. to r.) \uparrow EPY: tripod \uparrow : club \uparrow : \uparrow ΑΣΤΥΝΟΥΣ:
bow in case \uparrow : b. d.
Æ \leftarrow , 18 mm., 3.75 g. (O'Hagan sale)
3. Head of Herakles r., beardless, wearing lion's skin.
(l. to r.) \uparrow EPY: club \uparrow : \uparrow ΜΗΤΡΟΔΩΡ[ΟΣ]: bow in
case \uparrow
Æ \rightarrow , 13 mm., 1.60 g.
4. Types as 3: on rev., name ΠΑΝΤΑΙΝΕΤΟΣ
Æ \downarrow , 13.5 mm., 1.85 g.
5. Types as 3: on rev., name ΦΙΛΙΤΗΣ
Æ (a) \uparrow , 13 mm., 1.85 g. (b) \downarrow , 13 mm., 2.19 g.
(b) Balliol Coll.)
6. Types as 3, but on rev. order bow in case \uparrow : name \uparrow :
ΔΙΟΝΥΣΙΟΣ
Æ \downarrow , 12 mm., 1.98 g.
7. Types as 6: on rev., name ΟΤΤΑΛΟΣ
Æ \downarrow , 13 mm., 1.85 g.
8. Head of Herakles r., beardless, wearing lion's skin.
(l. to r.) Bow in case \uparrow : \downarrow [A]ΠΟΛΛΟΔΟΤΟΣ: club \uparrow :
 \downarrow EPY
Æ \rightarrow , 12.5 mm., 1.64 g.
9. Head of Herakles r., beardless, wearing lion's skin.
(l. to r.) \uparrow EPY: club \uparrow : \uparrow ΗΡΑΚΛΕ
ΩΤΗΣ: bow in case \uparrow
Æ \uparrow , 10 mm., 0.89 g.

10. Types as 9 : on rev., name ΠΟΛΥΧΑΡΗΣ
 Æ (a) ↓, 11 mm., 0.95 g. (b) ↑, 11 mm., 0.77 g.
 ((b) G. J. Chester)
11. Head of Herakles r., beardless, wearing lion's skin.
 (l. to r.) Bow in case ↑: ↑ΜΗΤΡΟΔΩΡΟΣ: club ↑:
 ↑ΕΡΥ: ↑
 Æ ↑, 11.5 mm., 1.17 g. (G. J. Chester)
12. Head of Herakles three-quarters r., beardless, wearing lion's skin.
 (l. to r.) ↑ΕΡΥ: club A: ↑ΠΑΥΣΑΝΙΑΣ: bow in case ↑
 Æ ↑, 15 mm., 2.43 g.
13. Head of Herakles r., beardless, wearing lion's skin.
 (l. to r.) ↑ΕΡΥ A: club ↑: ↑ΧΑΡΜΗΣ: bow in case ↑
 Æ (a) →, 17 mm., 3.18 g. (b) ↓, 17 mm., 2.73 g.
 (c) ←, 16.5 mm., 2.88 g. ((b) G. J. Chester)
 On the obverse of (c), ○ cmk., six-pointed star.
14. Head of Herakles r., beardless, wearing lion's skin.
 [○ cmk., six-pointed star.]
 (l. to r.) Race-torch ↑: club ↓: ↑ΠΥΘΗΣ: bow in case ↑: ↓ΕΡΥ [○ cmk., six-pointed star.]
 Æ ↑, 17 mm., 4.04 g.
15. Head of Herakles r., beardless, wearing lion's skin.
 (l. to r.) Aegis: club ↓: ↓ΜΗΤΡΟΔΩΡΟΣ: bow in case ↑: ↓ΕΡΥ
 ΛΗΝΑΙΟΥ
 Æ ↑ (a) 16.5 mm., 3.69 g. (b) 17 mm., 3.36 g.
 On the obverse of (a), ○ cmk., six-pointed star.
16. Bow in case ↑
 (l. to r.) ↑ΕΡΥ: club ↑: ↑ΠΑΥΣΑΝΙΑΣ: ? flower.
 Æ ↓, 12 mm., 1.34 g.
17. Head of Helios to front, radiate.
 ΕΡΥ | ΑΠΟΛΛΩ | ΝΟΦΑΝΗ[Σ]
 Æ ↑, 11 mm., 1.24 g.

18. Types as 17: on rev., EPY | ΔAMA | ΛΗΣ
Æ ↑, 11.5 mm., 1.24 g.
19. Types as 17: on rev., EPY | ΔIONY | ΣΙΟΣ
Æ ↑, 12 mm., 1.21 g.
20. Types as 17: on rev., EPY | ΜΗΤΡΟ | ΔΩΡΟΣ
Æ ↑, 11 mm., 1.17 g.
21. Types as 17: on rev., EPY | ΠΡΩΤΟ | ΓΕΝΗΣ
Æ ↑, 10 mm., 0.98 g.
22. Club ↑: line b.
EPY | ΓΝΩΤΟ[Σ]
Æ ↑, 9 mm., 0.82 g.
23. Types as 22, but on obv. b. d.: on rev. EPY | ΔΗΜΗ | ΤΡΙΟΣ
Æ ↑, 9 mm., 1.10 g.
24. Types as 23: on rev., EPY | ΔIONY | ΣΙΟΣ
Æ ↑, 10.5 mm., 0.98 g.
25. Types as 22: on rev., EPY | ΔΙΟΦΑΝ | ΤΟΣ
Æ ↑, 9 mm., 0.67 g.
26. Types as 23: on rev., EPY | ΕΚΑΤΩ | ΝΥΜΟ[Σ]
Æ ←, 9.5 mm., 0.95 g.
27. Types as 22: on rev., ΜΗ | ΤΡΑΣ | EPY
Æ ↑, 10.5 mm., 0.67 g.
28. Types as 23: on rev., EPY | ΠΑ | ΡΙΣ
Æ ↑, 10 mm., 0.80 g.
29. Types as 23: on rev., EPY | ΦΥΡ | ΣΩΝ
Æ ↑, 9 mm., 0.92 g.
30. Head of Herakles r., beardless, wearing lion's skin.
(l. to r.) ↑EPY: club ↑: ↑ΦΙΛΙΣΚΟΣ
case ↑ ΠΥΘΙΚΩΝΤΟΣ: bow in
Æ ↓, 19 mm., 5.02 g.

31. Head of Athene r., wearing crested Corinthian helmet: b. d.

ΘΕΡΣΗΣ | ΕΚΑΤΟΔ[Ω] | ΡΟΥ

Æ ↑, 13 mm., 1.95 g.

32. Bow in case ↑

Club ↑

Æ ↓, 13 mm., 2.67 g.

33. ΣΙΕΡΑΥ ΝΚΛΗΤΟC Bust r., draped.

Σ.Κ.ΚΑ ΡΟΥ.ΕΡΥΘΡ (inside) ΣΑΙΩ Ν Tyche standing l., crowned with modius, wearing long chiton and peplos, resting r. on rudder, holding cornucopiae in l.

Æ ↓, 23 mm., 5.37 g. (Godwyn)

The strategos may be Ἐκαταίος, strategos for the second time under Philip: the obverse type is of Gordian III—Philip date. But there is no trace of -ΤΑΙ- on the coin. Compare also Mi. iii. 132/539.

LEBEDUS.

1. Head of Athene l., wearing crestless Corinthian helmet.

Owl standing r., head to front: i. f. r. prow → and, ab., Æ, l. ↓ΙΗΝΟΔΟΤΟΣ

Æ ↑, 16 mm., 1.98 g. (Naville sale x)

2. Head of Athene to front, wearing triple-crested helmet.

Owl standing r., head to front: r. ↓Æ, l. ↓ΤΗΡΗΣ

Æ ↑, 13.5 mm., 1.53 g.

3. Head of Athene r., wearing crested Corinthian helmet.

Prow r.: i. f. ab. Æ, bel. ΑΛΚΙΜΑΧ[ΟΣ]

Æ ↑, 16 mm., 3.15 g.

4. Bust of Athene to front, slightly l., wearing triple-crested helmet and chiton: b. d.

Dionysos standing l., wearing short chiton, holding kantharos in r., resting l. on thyrsos: i. f. l. ↓Æ, r. ↓ΑΝΤΙΓΕΝΗ[Σ]

Æ ↑, 19 mm., 5.73 g.

MAGNESIA.

1. Horseman, wearing helmet, cuirass, and chlamys, on horse prancing r., holding spear couched in r., below horse, B: b. d.

Humped bull butting l.: ab., ΜΑΓΝΗΤΩΝ, in ex. ΔΙΟΝΥΣΙΟΣ
ΔΗΜΗΤΡΙΟ[Υ]: around, Maeander pattern.

Æ ↑, 15 mm., 2.74 g. (Neville sale i)

2. Horseman as on 1: b. d.

Humped bull butting l.: ab., ΜΑΓ, in ex. ΔΗΜΗΤΡΙΟ[Σ]: around, Maeander pattern.
]ΣΙΜΑ[

Æ ↑, 12 mm., 1.53 g.

3. Types as 2, but no borders: on rev., ab., ΜΑΓΝ, in ex. [Θ]ΡΑΣΥΜΗΔΗΣ

Æ ↑, 14 mm., 2.11 g. (G. J. Chester)

4. Types as 3: on rev., ab., ΚΛΕΩ[, in ex. ΜΑΓΝΗΤΩΝ[N]

Æ ↑, 13.5 mm., 2.12 g.

5. Bust of Artemis r., crowned with stephane, wearing chiton, quiver at shoulder.

Horseman as on 1: ab., ΜΑΓ Ν[, bel. ΚΡΑΤΙΠΠΟΣ

Æ ↑, 20 mm., 6.62 g.

6. Head of Athene r., wearing crested Athenian helmet adorned with griffin (?).

ΣΜΑΓΝ \ ΗΤΩΝ Horseman as on 1: bel., ΕΥΚΛΗ[Σ]
ΚΡΑΤΙΝΟ[Σ]: i. f. l. A

Æ ↑, 20 mm., 8.80 g.

7. Types as 6: on rev., i. f. l. Σ

Æ ↑ (a) 22 mm., 11.21 g. (b) 20 mm., 9.56 g.
(c) 20 mm., 9.65 g. ((c) Raye)

The letter behind the horse on the reverse does not appear to have been noted in previous publications of the type of 6 and 7.

8. ὌΒΟΥΛΗ ἙΜΑΓΝΗ Female bust r., veiled and draped.

ἙΠΙΓΡΑΜΜΑ ἙΠΙΤΥΝΧ Female figure standing to front, crowned with modius, wearing long chiton and peplos, r. hand on hip, cornucopiae in l.

Æ ↓, 23 mm., 4.35 g. [Pl. VIII. 5.]

The magistrate of this coin is dated, on the evidence of Imhoof, *Gr. M.*, 643/310, to the reign of Antoninus Pius.

9. ἙΡΑ ὈΥΝΚΛΗΤΟΣ Youthful male bust r., wearing chlamys.

ἙΚΟΥΝΔΟ ὈΥΜΑΓ ΝΗΤΩΝ Man stepping r., wearing short chiton and cothurni, holding torch horizontally in each hand, on prow r.

Æ ↓, 28.5 mm., 8.09 g. [Pl. VIII. 6.]

Secundus was grammateus under Caracalla—cf. *B. M. C.*, *Ionia*, 59 and 60.

Julia Domna.

10. ἙΟΥΛΙΑΔΟ ὈΜΝΑἙΒ Bust r., draped.

ἙΜΑΓ ΝΗ ὈΤΩΝ Aphrodite standing l., crowned with stephane, wearing long chiton and peplos, holding out pomegranate in r., nursing winged Eros on l. arm.

Æ ↓, 22.5 mm., 6.92 g. [Pl. VIII. 7.] (Raye)

Published by Wise, p. 72, Pl. XIV. 21. For discussion of the rev. type, see Imhoof, *Kl. M.*, 81/34: in that instance, however, the child is not winged.

11. ἙΟΥΔΟ ὈΜΝΑἙ Bust r., draped.

ἙΜΑΓΝ ὈΗΤΩΝ Nike advancing l., wearing long chiton, holding in r. wreath, in l. palm.

Æ ↓, 18.5 mm., 3.40 g.

Geta.

12. ἙΑΥ.Κ.Π.Ἑ. ὈΓἙΤΑἙ Bust r., laur., shoulders bare.

ἙΜΑΓΝ ὈΗΤΩΝ Cult-statue of Artemis to front, wearing high crown, fillets hanging from hands: on either side of head, Nike flying inwards: at feet, geese r. and l.

Æ ↓, 18.5 mm., 3.11 g.

Elagabalus.

13. QAVT·K·MANTΩNEINOCEVC Bust r., laur., back view.

QMAΓNHTΩNCOZΩN Wreath, within which eagle standing r., head l., wings open.

Æ ↓, 30 mm., 8.85 g.

Julia Maesa.

14. QIOVΛIAM AICACEB Bust r., wearing stephane, draped.

QEPINΛΛOYΓPAMAGNHTΩN Aphrodite standing l., crowned with stephane, wearing long chiton and peplos, holding out pomegranate in r., nursing nude Eros on l. arm.

Æ ↓, 31.5 mm., 12.79 g.

Severus Alexander.

15. QAVTKMAVPCEYAAEΞANΔPOC Bust r., laur., back view.

(a) CMAΓN ZHTΩN (b) CMAΓ ZNHTΩN Dionysos standing l., wearing himation over l. shoulder and round legs, holding in r. patera over panther standing l., looking back, resting l. on thyrsos.

Æ ↓ (a) 22 mm., 4.68 g. (b) 22 mm., 4.82 g.

Julia Mamaea.

16. CIOYΛIA ZMAMAIACEB Bust r., draped, wearing stephane.

QEPIGPAYΛOYMAΓNHTΩNNEΩKOP (inside) C - - APTE ZMIΔOC Apollo standing r., rad., wearing long robe, holding in r. plectrum, in l. lyre. [O cmk. C]

Æ ↓, 29 mm., 8.87 g.

(Raye)

Published by Wise, p. 66.

Maximinus.

17. CAYTKΓIOYH ZMAEIMEINOC Bust r., laur., back view.

ΣΕ Η ΠΑΥΡΤΥ ΧΙΚΟΥ ΝΑΓΝΗΤΩ Nike ad-
N
vancing r., wearing long chiton, holding in r. wreath,
in l. palm.

Æ ↓, 31 mm., 8.34 g.

Maximus.

18. ΣΓΙΟΒΗ ΝΑΞΙΜΟΚ Bust r., laur., back view.

ΣΜΑ ΓΝ ΝΗΤ ΩΝ Crescent upwards: within it,
two stars vertically: above, two horizontally: at
sides, one on r., one on l.

Æ ↑, 22 mm., 4.76 g.

METROPOLIS.

Severus Alexander.

1. ΣΜ·ΑΥΡ·Α ΝΑΞΑΝΔΡΟΚ Bust r., laur., back view.

ΣΜΗΤΡΟ ΝΠΟΛΕΙΤΩΝ Tyche standing l., crowned
with modius, wearing long chiton and peplos, resting
r. on rudder, holding cornucopiae in l.

Æ ↓, 17 mm., 2.30 g.

Gordianus III.

2. ΝΑΥΤ·Κ·Μ·ΑΝΤ·ΓΟΡΔΙΑΝΟΚ Bust r., laur., back
view.

ΣΕ Η ΣΡΜΙΟΥΗΡ ΝΑΚΛΑΜΗΤΡΟΠΟ ΝΛΕΙΤΩ (ins.)
ΣΝ Kybele seated l. on high-backed throne, wearing
turreted crown, long chiton, and peplos, holding
patera in r. hand, resting l. elbow on tympanum:
by throne, lion seated r.

Æ ↓, 31 mm., 8.09 g. (C. Warren)

3. ΣΑΥΤ·Κ·Μ·ΑΝ ΝΤ·ΓΟΡΔΙΑΝΟΚ Bust r., laur., back
view.

ΣΕΠΣΤΡΑΥΡΔ ΝΙΟΓΕΝΟΥΣΜΗΤΡ ←ΟΠΟ (inside)
ΝΛΕΙΤΩΝ Kybele as on 2, but lion seated l. at her
feet.

Æ ↓, 29.5 mm., 9.18 g.

4. ΣΓΟΡ ΝΔΙΑΝΟΚ Bust r., laur., back view.

ΣΜΗΤΡΟ ΝΠΟ (ex.) →ΛΕΙΤΩΝ River-god recum-

bent l., himation over legs, holding reed in r., resting l. elbow on urn.

Æ ↓, 17 mm., 2.27 g.

5. $\zeta\text{ΑΥΤΚΓΟ } \text{Ῥ} \Delta \text{ΙΑΝΟC}$ Bust r., laur., back view.

$\zeta\text{ΜΗΤΡΟΠ } \text{ῬΟΛΕΙ} \leftarrow \text{ΤΩΝ}$ River-god as on 4.

Æ ↓, 16.5 mm., 2.84 g.

Otacilia Severa.

6. $\zeta\text{ΜΑΡ} \cdot \Omega \text{ΤΑ} \cdot \text{Ῥ} \text{CΕΥΗΡΑ} \cdot$ Bust r., draped, wearing stephane.

$\zeta\text{Ε} \text{ ἈCΤΡ} \cdot \text{ΑΥΡ} \cdot \Theta \text{Ε } \text{Ῥ} \Omega \text{ΝΟC} \cdot \text{ΜΗΤΡΟΠΟ}$ (inside) $\zeta\text{ΛΕΙ} \text{ ῬΤΩΝ}$ Kybele as on 2, but lion by throne seated l., second lion at her feet seated l., looking back.

Æ ↓, 28 mm., 9.42 g.

Philip II.

7. $\zeta\text{ΜΙΟΥ } \text{Ῥ} \Phi \text{ΙΛΙΠΠΟC}$ Bust r., laur., back view.

$\zeta\text{ΜΗΤΡΟ } \text{Ῥ} \text{ΠΟΛΕΙΤΩΝ}$ Tyche standing l., crowned with modius, wearing long chiton and peplos, resting r. on rudder, holding cornucopiae in l.

Æ ↓, 21 mm., 3.17 g.

8. As 7 (same die).

$\zeta\text{ΜΗΤΡΟΠΟ}$ (ex.) $\rightarrow \text{ΛΕΙΤΩΝ}$ River-god recumbent l., himation over legs, holding reed in r., resting l. elbow on urn.

Æ ↑, 21 mm., 4.32 g.

Valerian.

9. $\zeta\text{ΑΥΤΚ} \cdot \text{ΠΟΠ} \cdot \text{ΛΙΚΙ} \cdot \text{Ο } \text{Ῥ} \text{ΥΑΛΕΡΙΑΝΟC}$ Bust r., laur., wearing cuirass and cloak.

$\text{Ῥ} \text{ΕΠCΤ} \cdot \text{ΟΥΑ} \cdot \text{ΝΕΙΚΙΑ} \cdot \text{ΠΡ} \text{ῬΟ ΜΗΤΡΟ}$ (ex.) ΠΟΛΕΙΤΩ
N

Emperor standing r., wearing cuirass, resting l. on spear, with r. grasping r. of goddess standing l., wearing long chiton and peplos, holding in l. sceptre transversely.

Æ ↓, 26.5 mm., 7.95 g.

For reverse type compare *B.M.C., Ionia*, 28, of Gallienus.

Gallienus.

10. $\text{QAVTKΠOΛIKIΓAΛΛIHNOC}$ Bust r., laur., back view.

$\text{CE} \uparrow \text{C} \uparrow \text{P} \uparrow \text{A} \uparrow \text{P} \uparrow \text{R} \uparrow \text{Ω} \uparrow \text{N} \uparrow \text{E} \uparrow \text{I} \uparrow \text{A} \uparrow \text{NOV (ex.)} \uparrow \text{MHPOTOLI} \uparrow \text{TΩN}$ (between columns)

$\uparrow \text{TCEP}$ Tetrastyle temple with arch between central columns, within which warrior advancing l., wearing helmet and cuirass, resting r. on spear, l. on shield.

$\mathcal{A} \downarrow$, 25.5 mm., 8.19 g. [Pl. VIII. 8.]

MILETUS.

1. Head of Apollo l., laur., hair long and loose.

Lion standing l., head turned back: i. f. r., star of six rays, l. \mathcal{M} : in ex. $[\Theta] \text{EOΓNHTOΣ}$

$\mathcal{A} \uparrow$, 13 mm., 1.64 g.

2. Head of Apollo l., laur., hair in two long curls.

Lion standing l., head turned back: i. f. r., ornamented star: in ex. ΘEOΠPOΠ[OΣ]

$\mathcal{A} \uparrow$, 11 mm., 1.70 g.

There is no trace of the monogram \mathcal{M} on the coin.

3. Head of Apollo l., laur., hair long and loose.

Lion standing l., head turned back: i. f. r. star of eight rays, l. \mathcal{M} and, bel., E: in ex. AEONTIΣKO

$\mathcal{A} \uparrow$, 21 mm., 5.26 g. (Neville sale vii)

This is a variant of Mi. S. vi. 266/1194, which has T in place of E.

4. Types as 3: on rev., to l., bel., \mathcal{M} , in ex. $[\Sigma] \text{TPA-TOKA[HΣ]}$

$\mathcal{A} \uparrow$, 16 mm., 2.24 g.

Compare Mi. iii. 165/748, with variant monogram.

5. Head of Apollo r., laur., hair long and loose.

Lion standing r., head turned back: i. f. l. star of eight rays, r. \mathcal{M} and, bel., E: in ex. PAIΩNIOC

$\mathcal{A} \uparrow$, 19 mm., 4.97 g. (Neville sale vii)

6. Types as 5: on rev., r., bel., \mathbb{R} , in ex. ΔΙΟΓΕΝΗΣ
 \mathcal{R} ↑, 16 mm., 2.45 g. (Neville sale v)
7. Lion standing l., head turned back: to r., ab., \mathcal{M}
 Ornamented star: around, between rays, Λ Ε Ο Ν
 Τ Ε Ο Σ
 $\mathcal{A}\mathcal{E}$ ←, 15 mm., 2.41 g.
8. Head of Apollo r., laur., hair long and loose.
 Lion standing r., head turned back: ab., to l., star of
 eight rays: in ex. ΛΥΚΟΣ
 $\mathcal{A}\mathcal{E}$ ↑, 18.5 mm., 4.36 g.
9. Head of Apollo to front, slightly l., laur.
 Lion standing r., head turned back: ab., to l., two
 stars of eight rays: i. f. r. M, in ex. ΑΡΤΕΜΩΝ
 $\mathcal{A}\mathcal{E}$ ↑, 18 mm., 3.57 g.
10. Types as 9: on rev., i. f. r. Δ, in ex. [Δ]ΙΟΔΩΡΟ[Σ]
 $\mathcal{A}\mathcal{E}$ ↗, 17 mm., 3.38 g.
11. Types as 9: on rev., in ex., ΕΥΑΝΔΡΙΔΗ[Σ]
 $\mathcal{A}\mathcal{E}$ ↑, 19 mm., 3.91 g.
12. Types as 9: on rev., in ex., [ΣΩ]ΣΙΠΑΤΡΟΣ
 $\mathcal{A}\mathcal{E}$ ↑, 18 mm., 4.45 g.
13. Types as 9, but one star only on rev.: i. f. r. \mathcal{M} and,
 bel., $\mathcal{N}\mathcal{K}$, in ex. [Δ]ΙΟΝΥΣΙΚΛΗΣ
 $\mathcal{A}\mathcal{E}$ ↑, 16 mm., 5.00 g.
14. Head of Apollo r., laur., hair in curls: b. d.
 Lion standing r., head turned back: ab., to l., star:
 i. f. r. \mathcal{M} and, bel., ↑ΔΗ: in ex. ΙΑΤΡΟΚΛΗ: in
 laurel-wreath.
 $\mathcal{A}\mathcal{E}$ ↑, 18 mm., 3.92 g. (Raye)
 Published by Wise, p. 9, Pl. V. 10.
15. Types as 14: on rev., i. f. r. \mathcal{M} and, bel., \mathcal{Z} : in ex.
 [Ι]ΠΠΟΛΟΧΟ[Σ]
 $\mathcal{A}\mathcal{E}$ ↑, 19.5 mm., 5.33 g.

16. Statue of Apollo standing r., nude, holding on r. stag, in l. bow: i. f. r. \mathfrak{M} : b. d.

Lion couched r., head turned back: ab., to l., star of eight rays: i. f. r. Σ , in ex. EYΔHMOΣ

Æ ↑, 22 mm., 4.76 g.

Julia Domna.

17. $\Sigma\text{IOY}\Lambda\text{IA}\Delta\ \Sigma\text{OM}$ ----- Bust r., draped. [○ cmk., head of ?].

$\Sigma\text{MIAHCION}\epsilon\text{ΠI}\ \Sigma\text{MENAN}\Delta\text{POY}$ Statue of Apollo standing to front, nude, holding on r. stag, in l. bow.

Æ ↓, 27 mm., 7.30 g.

Julia Maesa.

18. $\Sigma\text{IOY}\Lambda\text{IA}\cdot\ \Sigma\text{MAICACEB}$ Bust r., draped, wearing stephane.

$\Sigma\text{EΠIAPXAVPAIAI}\ \Sigma\text{ANOVMI}\Lambda\text{HCION}$ Tyche standing l., crowned with modius, wearing long chiton and peplos, resting r. on rudder, holding cornucopiae in l.

Æ ↓, 28 mm., 11.86 g.

Severus Alexander.

19. $\text{Q}[\Lambda\Lambda]\epsilon\Xi\text{AN}\Delta\text{POCKAIC}$ Bust r., bareheaded, back view.

$\Sigma\text{MIAH}\ \Sigma\text{CION}$ Statue of Apollo standing to front, holding on r. stag, in l. bow.

Æ ↑, 18 mm., 3.15 g.

PHOCAEA.

1. Bust of Hermes r., wearing petasos and chlamys.

Forepart of griffin r., wings curled: i. f. $\Phi\ \Omega$, below $\Delta\text{IO}\Delta\text{OP}[\text{O}\Sigma]$

Æ ↑, 16 mm., 4.04 g.

2. Head of Athene r., wearing crested Corinthian helmet.

Head of griffin r., between piloi surmounted by stars: bel., $\text{TIMO}\theta\text{EO}\Sigma$

Æ ↑ (a) 13.5 mm., 1.87 g. (b) 11.5 mm., 2.05 g.

((b) G. J. Chester)

3. Bust of city-goddess r., wearing turreted crown and draped.

(ex.) $\Phi\Omega K$ $A\epsilon\Omega$ N Griffin walking r.

$\mathcal{A} \downarrow$, 19.5 mm., 5.81 g.

TEOS.

1. Griffin seated r., l. forepaw raised.

Kantharos, above which bunch of grapes: i. f. ab.

$\rightarrow [T]H \Omega[N]$, bel. $[A]\Theta HNO \Delta\Omega\rho\sigma$

$\mathcal{A} \downarrow$, 17 mm., 4.29 g.

2. Types as 1: on rev., $[T]H \Omega[N]$, $\Delta IO\Gamma ENH\varsigma$

$\mathcal{A} \uparrow$, 16 mm., 5.27 g. (New College)

3. Types as 1, but no bunch of grapes on rev.: i. f. $THI\Omega N$, $ME\Gamma A K\Lambda H\varsigma$

$\mathcal{A} \uparrow$, 18 mm., 3.69 g.

4. Types as 1: on rev., $THI \Omega N$, $\Pi Y\Theta I \Omega N$

$\mathcal{A} \uparrow$, 16.5 mm., 3.41 g.

5. Types as 1, but no bunch of grapes on rev.: i. f. THI , $[T]E\Lambda EY TIA\varsigma$

$\mathcal{A} \downarrow$, 11.5 mm., 1.26 g.

6. Griffin seated r., l. forepaw raised.

Bunch of grapes: i. f. ab. $\rightarrow \overset{THI}{\Omega} N$, bel. $A\Theta HNAIO\varsigma$

$\mathcal{A} \uparrow$, 13 mm., 2.16 g.

7. Types as 6: on rev., $\overset{THI}{\Omega} N$, $A\Theta HNO\Delta\Omega\rho\sigma$

$\mathcal{A} \leftarrow$, 12 mm., 1.66 g.

8. Types as 6: on rev., $\overset{THI}{\Omega} N$, $AMYNTH\varsigma$

$\mathcal{A} \uparrow$, 12 mm., 1.38 g.

9. Types as 6: on rev., $\overset{T}{\Omega} HI N$, $\Delta HM \epsilon AC$

$\mathcal{A} \uparrow$, 11 mm., 1.14 g.

10. Head of city-goddess r., wearing turreted crown, hair rolled.

THI ΩN Bunch of grapes.

Æ ↓ (a) 15 mm., 2.75 g. (b) 15 mm., 2.55 g.

11. Griffin running r.

Lyre of four strings: to r. ↓THIΩN

Æ ↑ (a) 21 mm., 6.58 g. (b) 20 mm., 6.40 g.

12. Types as 11, but lyre of three strings: on rev.,
r. ↓THIΩN, l. ↓KAAΛIKAHΣ

Æ ↑, 18 mm., 6.53 g. (New College)

Probably Mi. iii. 260/1480 is of this magistrate.

13. Griffin seated r., l. forepaw raised.

Lyre of three strings: i. f. ab. → $\overset{\text{THI}}{\Omega}$ N, bel. ζAMYN
ϣTHΣ

Æ →, 14 mm., 3.45 g.

14. Types as 13: on rev., →THIΩN, ϣANAΞΙΑΔHΣ

Æ ↓, 13 mm., 2.29 g.

15. Types as 13: on rev. →THIΩN, ζANΔP[O] ϣNIKOY

Æ ↑, 14 mm., 1.96 g.

16. Types as 13, but lyre of four strings: on rev.,
[THIΩN], ζEKATΩ ϣNYMOΣ

Æ ↑, 12.5 mm., 2.32 g.

17. Types as 13: on rev., → $\overset{\text{THI}}{\Omega}$ N, ϣONHΣIMOΣ

Æ ↑, 13 mm., 2.20 g.

18. Griffin seated r., l. forepaw raised.

⌘ in wreath of ivy: below, THIΩN

Æ ↓, 17 mm., 3.81 g.

The monogram on the coin of these types, *B.M.C., Ionia*, 44, is printed upside down in the Catalogue, judged by specimens with the same monogram at Oxford.

19. Griffin seated r., l. forepaw raised: *overstamped with*
Head of Dionysos r., crowned with ivy.

Wreath of ivy [in which ? $\overset{TH}{\Omega N}$]: *overstamped with*

Bunch of grapes, around which $\begin{matrix} T & H \\ \Omega & N \end{matrix}$

Æ ↓ and ↑, 19 mm., 5.88 g. (G. J. Chester)

20. Griffin running r.

~MHTPOΔΩΡΟΣ Wreath of ivy, in which $\begin{matrix} TH \\ \Omega N \end{matrix}$

Æ ↑, 12.5 mm., 1.86 g.

21. Types as 20: on rev., ΓCTHCIXOPOC

Æ ↑, 13.5 mm., 2.24 g. (Godwyn)

22. Forepart of griffin r.

Wreath of ivy, in which lyre: ab. →THIΩN, bel.
→ONHΞIM[OΣ]

Æ ↓, 11.5 mm., 1.29 g.

23. Bunch of grapes: b. d.

Dionysos standing l., wearing himation, holding
kantharos in r., resting l. on thyrsos: i. f. r. ↑THIΩN:
b. d.

Æ ↑, 15.5 mm., 3.55 g.

24. ΝΤΕΩC Bust of Dionysos r., with crown of three
turrets, wearing chiton, thyrsos behind shoulder.

ΝCTPBEPE ΚΚΟVΝΔΟV Bearded man standing to
front, head r., wearing crested helmet, resting r. on
spear, holding sheathed sword in l.: at his feet r.,
?prow.

Æ ↓, 26 mm., 15.18 g. [Pl. VIII. 9.]

Reign of M. Aurelius: compare Imhoof, *Rev.*
Suisse, xiii. 239/10.

25. ΝΤΕΩC Bust of Dionysos r. as on 24.

ΣΕΠICTPAKANE ΝΙ ΚΗΦΟΡΟV (inside) ΣΤ ΗΙΩN
Dionysos standing l., wearing himation over l.
shoulder and round legs, holding kantharos in r.,
resting l. on thyrsos: at his feet, ?panther.

Æ ↑, 24 mm., 5.96 g.

Valerian.

26. $\Phi\Lambda\cdot\text{K}\cdot\text{ΠO}\cdot\text{ΛIK}\cdot\text{OY}\Lambda\Lambda\text{EP}\text{I}$ (ins.) ΔANOC Bust r., laur., back view.

$\Sigma\text{CTP}\cdot\text{K}\Lambda\text{ΠA}\ \Delta\text{NKPA}\text{T}\text{OY}\text{C}$ (ins.) $\Sigma\text{THI}\ \Delta\text{ON}$ Tyche standing l., crowned with modius, wearing long chiton and peplos, resting r. on rudder, holding cornucopiae in l.

Æ ↓, 27 mm., 6.29 g.

Salonina.

27. $\Sigma\text{KOPNCA}\ \Delta\Lambda\Omega\text{NEINAC}$ Bust r., draped, wearing stephane.

$\Sigma\text{EΠICTPA}\cdot\text{K}\Lambda\cdot\text{N}\ \Delta\text{EI}\ \text{KHΦOPOY}$ (ins.) $\Sigma\text{T}\ \text{HI}\Omega\text{N}$ Dionysos standing l., wearing himation over l. shoulder and round legs, holding kantharos in r., resting l. on thyrsos: at his feet, panther l.

Æ ↓, 24.5 mm., 5.31 g.

Valerian jr.

28. $\Phi\text{ΠOΛIKOY}\Lambda\Lambda\text{EPIANOC}$ Bust r., bareheaded, back view.

$\Sigma\text{THI}\Omega\ \Delta\text{N}$ Pan standing to front, head r., holding in r. pedom over r. shoulder.

Æ ↓, 23 mm., 3.73 g.

J. G. MILNE.

XI.

COINS FROM THE EXCAVATIONS AT AL-MINA (1936).

[SEE PLATE IX.]

THE coins described in this article were unearthed in the course of the excavations undertaken during the summer of 1936 by Sir Leonard Woolley on a site which he is disposed to identify with Posidium,¹ and I am indebted to him for the opportunity of recording them here.

Apart from the three silver hoards the greater part naturally consisted of bronze coins, and was found in the uppermost level, which, owing to reoccupation and disturbance in medieval times, was not sharply divided from the second level dated by the excavators c. 375-300 B.C. Owing presumably to the nature of the soil almost all the bronze coins were heavily corroded. The virtual absence of coins of the third and following seven centuries B.C.-A.D., contrasted with the abundance of those of the preceding century, fully bears out the excavator's view that the site was abandoned about 300 B.C. for a long period. The numismatic evidence also points to reoccupation in Byzantine and later medieval times; in fact the latter period is again comparatively rich, and its coins, including a hoard of the Princes of Antioch, have been dealt with separately by Mr. Derek Allen

¹ For a general account of the excavations see *Antiquaries Journal*, 1937, pp. 1 seqq. The Roman and Byzantine coins have been identified by Mr. Mattingly, the Medieval by Mr. Derek Allen, and the Oriental by Mr. Walker.

elsewhere (see p. 200). The picture presented of the currency of the Greek emporium is an interesting one. Just as at Aradus, the nearest large city, where the mint opens not long before 400 B.C., so here coined money does not appear to have been used until late in the fifth century. The earliest coins found were Athenian tetradrachms struck not earlier than 450, and even these occurred in early fourth-century hoards. Before the Macedonian period tetradrachms of this series clearly formed the staple for larger transactions; they were imitated *bona fide*, perhaps in the local mint,² and *mala fide* by counterfeiters who produced plated pieces. On the other hand, staters of the cities of Phoenicia, Cilicia, and Cyprus are conspicuous by their absence, that of staters of Aradus being specially remarkable. For minor transactions the picture is completely reversed. The lowest Athenian denomination to be found was a drachm, and small change is provided by the silver obols and other fractions of Aradus and Sidon, which occur in the hoards side by side with tetradrachms of Athenian types. Bronze coins from these two cities and from Cyprus are also common and a certain number have drifted in from the islands and Ionia. In the Macedonian period Al-Mina, so long as it lasted, must have been a busy port. In fact the majority of the bronze coins belong to this time and bear the name and types of Alexander the Great. So far as the mints are known, the coins mostly come, as before, from Cyprus (Salamis, &c.), Phoenicia (Aradus, &c.), and Cilicia (Tarsus). As provenance is perhaps the most important single factor in the identification of the mints of Alexander's bronze

² See the fuller discussion of these issues after the description of the hoards.

coinage, it is hoped that the full details given below may help towards this end; e.g. the numerous series with the symbol of a bunch of grapes should belong in the neighbourhood. In this connexion it may be significant that the types of the coins of Posidium known³ are chthonic, with a reference to fertility and to the vine in particular; and it is with Posidium that Sir Leonard Woolley would identify the site.

Two other quasi-numismatic objects should perhaps be mentioned here. One is the half of a small gold pellet which has been cut in two. It bears no mark of any kind, weighs 37.9 gr. (2.46 grm.) and measures 10.0 × 6.5 mm. The other object, is of some interest. It is a little coin-like roundel of lead (14.0 × 12.5 mm.) with one side blank and on the other a facing head of Athena in triple-crested helmet, &c., exactly as on the well-known coins of Syracuse of the end of the fifth century,⁴ though of course without the encircling dolphins. What purpose it served is doubtful.

The Hoards.

Three hoards of silver coins were unearthed in the course of the excavations, all in level three, so that limiting dates of c. 420–375 B.C. are implied for their deposition. With the lower date the composition of all three hoards accords well enough.

The first hoard was contained in a small silver vase now in the British Museum and consisted of fifty-four coins, almost all minute pieces of Aradus. Its actual composition was:—

³ See Appendix: Coins of Posidium.

⁴ Cf. the hemidrachm in the Lloyd Collection (*Sylloge Num. Graec.* ii, no. 1398) which is practically the same size.

Aradus.

Obol. *B.M.C.*, no. 45 (Bearded head (Dagon?): Galley), 1 specimen.

Eighth? *B.M.C.*, nos. 76-8 (Bearded head: Tortoise), 48 spec.

Sixteenth. Rouvier, *Num. de la Phénicie*, no. 27. (Same types), 2 spec.

Sidon.

Sixteenth-Shekel. *B.M.C.*, nos. 36 seqq. (Galley: King slaying lion), 2 spec.

Thirty-second-Shekel. *Obv.* Galley; letter (if any) off flan. *Rev.* King shooting r.

Rouvier, *ibid.*, no. 1099 bis.

The head on the smallest coins of Aradus is usually considered to be the wreathed head of the sea-god which appears on the larger pieces. The scale, however, is so small that it is difficult to be certain, and on many of the specimens in the present hoard the projections from the crown of the head suggest not so much the leaves of a wreath as the spikes of the *kidaris* of the Great King as they are seen on darics and sigli (*B.M.C. Arabia*, &c., Pl. XXIV-V). The King is, of course a common type at Sidon, near by. The weights are surprisingly accurate; the two which have been classified as sixteenths scale 0.06 and 0.04 grammes respectively; of the eighths single coins weigh as much as 0.11 and 0.10 grammes, 10 weigh 0.09, 19 weigh 0.08, 14 weigh 0.07 grammes.

The other two hoards were similar to each other in composition. One was buried in a clay jug and contained 35 coins made up as follows:—

Aradus.

Obols. *B.M.C.*, nos. 45 seqq. (Bearded head (Dagon?): Galley), 7 spec.

Athens and imitations.

Tetradrachms. Svoronos, *Trésor des Monnaies d'Athènes*, Pl. 12-17. (Athena head: owl), 18 spec.

The obols of Aradus call for no comment except as showing that the hoard cannot have been deposited before the first quarter of the fourth century. The tetradrachms are of considerable interest. They show wide variations of style though the weights are uniform.⁵ There is one of neat style with a small head [Pl. IX. 1], say about 450 B.C.: four of later but still fairly careful style [Pl. IX. 2-3], say about 425 B.C.; one cruder and later again, but still perhaps a product of the Athenian mint [Pl. IX. 4], say after the Syracusan expedition; and twelve of such crudeness that it is difficult to regard all, and impossible to regard some [e.g. Pl. IX. 5-8], as genuine Athenian coins. The treatment of the eyes and lips is particularly noticeable, while on the reverse the crescent appears sometimes to be misunderstood and is once (no. 8) omitted entirely. The same features are to be observed, though to a less degree, in the "Owls" of the other hoard, in which connexion they must be discussed later.

This second hoard comprised a gold necklace, a silver bracelet, and 43 coins made up as follows:—

Uncertain.

Obv. Trident with four prongs. *Rev.* Square incuse with filling pattern resembling a wreath.

AR 9.0 mm., 19.0 grs. (1.21 grm.). [Pl. IX. 13.]

⁵ The weights of the coins in this and the following hoard are not here given, as a heavy coating of chloride necessitated severe cleaning. Though affecting their relation to the weights of other coins, this did not, of course, appreciably affect their relation to each other. Casts of all the coins and record of their weights after cleaning are preserved in the Museum.

Obv. Head of Zeus l., laureate. *Rev.* Head of Heracles l. in lion-skin?

R → 10.0 mm., 13.5 gr. (0.87 grm.). [Pl. IX. 14.]

Aradus.

Obol, *B.M.C.*, nos. 45 seqq. (Bearded head (Dagon?): Galley). 6 spec.

Sidon.

Sixteenth, *B.M.C.*, nos. 36 seqq. (Galley: King slaying lion). 9 spec.

Athens and imitations.

Tetradrachms. Svoronos, *op. cit.* (Athena head: owl). [Pl. IX. 9-12.] 26 spec.

There is in the British Museum a diobol similar to the obol with the trident from the H. Weber Coll. (Forrer, *Cat. No.* 4591), with a different reverse pattern, and also an obol. The reverse pattern recalls those of the South-west coast of Asia Minor and the mint should perhaps be sought in that district or among the adjacent islands about 500 B.C. The coin is very little worn, and its presence in the hoard is remarkable. The reverse type of the second coin is not quite certain but in any case, it belongs to a class of coins issued somewhere in Cilicia in the first quarter of the fourth century (*B.M.C. Lycaonia, &c.*, p. 239). The Museum possesses a specimen with these types, acquired since the catalogue. Among the "Owls" the proportion of tetradrachms of normal style is higher than in the preceding hoard. Dividing them into the same four classes as before, we find three in the first class with the neat style and smallish head; nine in the second [Pl. IX. 9]; five in the third; six in the fourth [Pl. IX. 10-12]; and three plated coins, one of them resembling the earliest class in style, the other two

resembling the last class. It is very possible that one or two of the coins placed in the second and third classes are really non-Athenian and should have been placed in the fourth. The difficulty is to know where to draw the line. Svoronos, to judge by the titles to the plates of his *Trésor* cited above (all we have to go by), regarded most coins of our fourth class as being genuine Athenian issues, and includes several such on his Plate 17. He does not know, however, or does not include, examples with the blundered or omitted crescent on the reverse, and, apart from this feature, such coins are inseparable from the others. It may be suggested that the whole picture which he presents of Athenian coinage in the late fifth and fourth centuries has been distorted by the admission among genuine Attic coins of the imitations of them which are frequently found in Syria and in Egypt⁶ and which are only to be distinguished from their prototypes by their more or less divergent style. As these imitations are by no means uncommon, their inclusion has compelled him, in order to make room for them in the legitimate Athenian series, to extend the issue of archaizing fifth-century tetradrachms down to the time of Philip of Macedon, when, on his arrangement, it passes into the later issue which among other differences shows the eye no longer in profile.⁷ But there is a definite break in style between these two issues, and the obvious occasion for such a break would be the suspension of the normal operations of the Athenian mint for some years owing

⁶ In this connexion it is highly significant that the mound from which the Benha (Tel El-Athrib) hoard came, also produced a die with the name and types of Athens (*Journ. Int.*, 1905, p. 110).

⁷ See his Plates 19 (lower half) and 20.

to the Peloponnesian War and its after-effects. Operations were resumed in 394/3 B.C. which would accordingly be the natural date for the beginning of the silver tetradrachms which show the later eye. This is Head's view (*Hist. Num.*², p. 373), and it is confirmed by the hoard evidence. Coins of later style occur already in a Sicilian hoard of the early fourth century in conjunction with Sicilian tetradrachms of the fine period,⁸ while they are so numerous in Egyptian hoards (also of the fourth century, and most, if not all, buried before Alexander's conquest) that they require a longer period in which to have established themselves than the couple of decades left them as a maximum under Svoronos's arrangement. In this connexion it may be noted that the gold staters struck by the rebel Tachos and by Lampsacus^{8a} in Egypt in 361 B.C. which closely imitate Athenian types, already show the profile eye.

The occasion for the beginning of this imitative coinage should be looked for in the suspension, referred to above, of the regular supply of Attic coin during and after the Peloponnesian War. Some of it may actually have been made in the emporium whose site is Al-Mina. Once launched, such a coinage need not necessarily cease, though the urgent need which has brought it about may have passed.

In contrast with the pot hoard most tetradrachms in the second hoard have been tested for their metal, or countermarked: sometimes both. Of the 26, 11 have chisel-cuts; 3 have chisel-cuts and chop-marks; 1 a chisel-cut and the countermark α (*yod*); 1 a chop and a circular borehole; 1 a similar chop and borehole

⁸ The Contessa hoard (*Notizie degli Scavi*, 1888, p. 295).

^{8a} A. Baldwin, *Lampsakos*, A.J.N., 1924, p. 24, no. 18, and pp. 14-16.

and the countermark E; 2 the same countermark by itself; and 1 the countermarks \ominus and Θ .⁹ How necessary such precautions were is shown by the presence of three plated tetradrachms whose base cores have been revealed by chisel-cuts. Most interesting in this connexion, as showing how trivial a reward could satisfy the counterfeiter, is the fact that one of the obols of Sidon is also plated. Why the depositor should have thought such pieces worthy of inclusion in his hoard is not clear, unless in the hope of passing them off again some day.

Other Coins.

The list following comprises all other coins found during the excavations:—

GREEK SILVER.

Athens.

Obv. Head of Athena; *Rev.* Owl, &c. Tetradrachms (1) c. 450, (2) c. 425; 2 spec. Similar (plated); 4 spec. Similar. Drachm (plated).

Macedonian Kingdom.

Alexander the Great: *Obv.* Head of Heracles; *Rev.* Zeus seated l. Tetradrachm (Myriandros), Newell, *A.J.N.*, 1919, p. 32, no. 20. Drachms (Amphipolis), as Newell, *Demanhur N.N. & M.*, xix, no. 1550; (Pella), as Newell, *ibid.*, no. 1591. Obol, uncertain mint-marks.

Philip III, Arrhidacus: similar types. Drachm, uncertain mint-marks; 2 spec.

Aradus.

Obv. Head of Melkart r.; *Rev.* Galley; Tetrobol; *B.M.C.*, no. 27. Similar; obol; *B.M.C.*, no. 45 seqq.; 4 spec.

⁹ Similar boreholes as well as the last countermark occur more than once on "owls" from the Memphis hoard in the British Museum (Hill, *Num. Chron.*, 1917, p. 9).

Sidon.

Obv. Galley; *Rev.* King slaying lion; sixteenth; *B.M.C.*, no. 36; 4 spec.

GREEK BRONZE.

Macedon.

Philip II: *Obv.* Diademed head r.; *Rev.* Horseman r. ΦΙΛΙΠΠΟΥ; mint-mark uncertain; 18.0 mm.; 5 spec.

Alexander the Great: *Obv.* Head of Heracles r.; *Rev.* Eagle r. ΑΛΕΞΑΝΔΡΟΥ; mint-mark uncertain; 16.0 mm.; 1 spec.

Obv. Similar; *Rev.* ΑΛΕΞΑΝΔΡΟΥ downwards, between gorytus on l., and club on r.¹⁰; size 18.0–20.0 mm. On r. grapes and Α; 10 spec. ($\uparrow^7 \nearrow^1 \leftarrow^1 \downarrow^1$)¹¹. On r. grapes and Ⓞ; 3 spec. (\uparrow^3). On r. grapes (and letter ?); 10 spec. ($\uparrow^6 \nearrow^2 \leftarrow^1$ uncertain¹). Mint-mark uncertain; 1 spec. (\nearrow).

Similar; *Rev.* ΑΛΕΞΑΝΔΡΟΥ upwards. Mint-mark uncertain; 1 spec. (\nearrow).

Similar; *Rev.* ΑΛΕΞΑΝΔΡΟΥ downwards, between club on l. and gorytus on r. On l., Α; 2 spec. (\uparrow^1 , uncertain¹); Byblus (Adramelek). On l., branch; 1 spec. (\uparrow). On l., corn-ear; 1 spec. (\uparrow). Mint-mark uncertain; 5 spec. ($\uparrow^1 \nearrow^1$ uncertain³).

Similar; *Rev.* ΒΑΣΙΛΕΩΣ. On l., torch; 1 spec. (\uparrow).

Obv. Similar; *Rev.* Β Α between bow and quiver on l., and club on r. Mint-mark uncertain; 1 spec. (\nearrow).

Similar; *Rev.* ΑΛΕΞΑΝΔΡΟΥ downwards, on l. ΒΑΣΙΛΕΩΣ. On r., Α; 2 spec. (\downarrow^2); Aradus.

Similar; *Rev.* Without ΒΑΣΙΛΕΩΣ. On r. Α; 3 spec. ($\uparrow^1 \downarrow^2$); Byblus (Adramelek). On l. star; on r. Σ Α; 3 spec. (\leftarrow^2 , uncertain¹); Salamis. On r. wreath; 1 spec. (\rightarrow). *Obv.* In front, caduceus; *Rev.* on l. Ε⁷;

¹⁰ On this, and on the similar types which follow, the orientation of the reverse has been determined by the position of the club which is considered as standing vertically, head downwards.

¹¹ The arrows show the die-position and the numbers following them the number of specimens exhibiting each position.

on r. caduceus and ☉ ; 3 spec. (\uparrow^3) ; Tarsus. *Obv.* In front, caduceus ; *Rev.* on l., star ; on r., caduceus ; other marks uncertain ; 9 spec. ($\uparrow^1 \uparrow^3 \downarrow^5$) ; Tarsus. *Obv.* In front, caduceus ; *Rev.* on r., caduceus ; other marks uncertain ; 11 spec. ($\uparrow^5 \downarrow^3 \uparrow^1$ uncertain ²) ; Tarsus. Without mint-mark ; 1 spec. (\uparrow). Uncertain mint-mark (if any) ; 28 spec. ($\uparrow^8 \downarrow^8 \downarrow^4 \leftarrow^2 \rightarrow^3$ uncertain ²).

Similar ; *Rev.* ΑΛΕΞΑΝΔΡΟΥ upwards. Without mint-mark ; 3 spec. ($\uparrow^1 \downarrow^1 \leftarrow^1$). Uncertain mint-mark (if any) ; 3 spec. ($\uparrow^1 \downarrow^1 \uparrow^1$).

Similar ; *Rev.* ΑΛΕΞΑΝΔΡΟΥ upwards, between club on l., and bow and quiver on r. Uncertain mint-mark ; 1 spec. (\downarrow).

Similar ; *Rev.* ΑΛΕΞΑΝΔΡΟΥ downwards. Uncertain mint-mark ; 1 spec. (\downarrow).

Similar in general, but details of legend and types uncertain ; 26 spec.

Small denomination. *Obv.* Head of Heracles ; *Rev.* ΑΛΕΞΑΝΔΡΟΥ downwards, between club on l., and gorytus on r. 7.5-10.0 mm. On l. A P ; 7 spec. ($\rightarrow^5 \leftarrow^1 \uparrow^1$). Mint-mark uncertain ; 6 spec. ($\uparrow^2 \rightarrow^2 \leftarrow^1$ uncertain ¹).

Similar ; *Rev.* ΑΛΕΞΑΝΔΡΟΥ downwards, between bow and quiver on l., and club on r. On r., \mathfrak{A} ; 3 spec. ($\uparrow^2 \downarrow^1$) ; Byblus (Adramelek). Mint-mark uncertain ; 14 spec. ($\uparrow^5 \downarrow^1$ uncertain ⁸). Similar in general but details of legend and type uncertain ; 17 spec.

A Diadochus (Demetrius Pol. ?) ; *Obv.* Macedonian shield ; device, uncertain ; *Rev.* Crested helmet. Mint-mark uncertain ; 1 spec. 15.0 mm. ; Cyprus ?

City Coinages.

Cyzicus : *Obv.* Head of Kore-Soteira ; *Rev.* Tripod ; *B.M.C.*, no. 136. *Ephesus* : *Obv.* Bee ; *Rev.* Stag and palm-tree ; *B.M.C.*, no. 63 ; 2 spec. *Phrygia* : *Obv.* Facing head of Artemis ; *Rev.* Bull l. ; *B.M.C.*, nos. 4-8 ; 2 spec. *Cos* : *Obv.* Head of Heracles ; *Rev.* Crab ; *B.M.C.*, no. 102 ; 1 spec. *Rhodes* : *Obv.* Nymph's head r. ; *Rev.* Rose ; *B.M.C.*, no. 74 seqq. ; 2 spec. *Citium* : *Obv.* Head of Aphrodite l. ; *Rev.*

Melkart r.; *B.M.C.*, no. 72; 1 spec. *Salamis* (Cyprus): *Euagoras II*: *Obv.* Lion l.; *Rev.* Horse l.; *B.M.C.*, nos. 69-73; 3 spec. *Obv.* Head of Athena; *Rev.* Prow; *B.M.C.*, no. 74; 4 spec. *Aradus*: *Obv.* Triton; *Rev.* Galley, ~~44~~; *B.M.C.*, no. 83; 12 spec. Similar but smaller denomination; [Rouvier, no. 43]; 7 spec. *Obv.* Head r.; *Rev.* Galley, ~~44~~ unpublished?; 1 spec. *Sidon*: *Obv.* King as archer; *Rev.* Galley; *B.M.C.*, no. 53; 2 spec. *Obv.* King's(?) head r.; *Rev.* Galley; *B.M.C.*, no. 62; 1 spec. *Aradus or Sidon?*: *Obv.* Obliterated; *Rev.* Galley; 6 spec.

Syria: Seleucids.

Antiochus III: *Obv.* Portrait head; *Rev.* obliterated; 1 spec.; 13.5 mm. *Antiochus IV*: *Obv.* Portrait head; *Rev.* Zeus; *B.M.C.*, no. 31; 1 spec. *Obv.* Head of Demeter; *Rev.* Elephant head; *B.M.C.*, p. 43, nos. 1-4; 1 spec. *Antiochus IX*: *Obv.* Portrait head; *Rev.* Thunderbolt; *B.M.C.*, no. 16; 1 spec.

Ptolemies.

Ptolemy I (Cyprus): *Obv.* Head of Aphrodite r.; *Rev.* Eagle l. Svoronos, *Νομίσματα τῶν Πτολ.* II, Pl. VI, nos. 25/6; 7 spec. *Ptolemy III*: *Obv.* Head of Berenice II; *Rev.* Eagle; Svoronos, *ibid.*, Pl. XXXI, nos. 24-6; 1 spec.

Also between thirty and forty indecipherable coins or fragments, probably either of Aradus or of Alexander the Great.

ROMAN EMPIRE.

I. *Civic Coinages.*

Uncertain mints of Syria or Mesopotamia. Commodus: *Obv.* Portrait bust r.; *Rev.* Bust of City-Tyche r.¹²; 16.5 mm.¹³ Caracalla: *Obv.* Portrait bust l. with shield; *Rev.* obliterated¹²; 24.0 mm. Tyre. Elagabalus?: *Obv.* Portrait bust r.; *Rev.* Bust of Astarte r.

¹² Details uncertain.

¹³ Single specimens henceforward unless more are indicated.

in distyle shrine¹²; 20.0 mm. *Antioch.* Trebonianus Gallus: *Obv.* Portrait bust r.; *Rev.* Tyche in temple; 30.0 mm., *B.M.C.*, no. 654.

II. Imperial Coinage.

Gallienus: *Rev.* Minerva Aug. VII C. Mattingly & Sydenham, *Roman Imperial Coinage*, V, i, p. 185, no. 617. Aurelian: *Rev.* Fides Militum C. and star? *ibid.*, p. 302, no. 844. Maximian: *Rev.* Two standing figures¹² (*Antioch.*); 22.5 mm. Constantius II: *Rev.* Fel. Temp. Reparatio¹²; 13.5 mm. Constantius II: *Rev.* Vot. XXX, Mult. XXXX¹²; 15.0 mm. Arcadius: *Rev.* Virtus Exerciti Ant.; 18.0 mm. Honorius: *Rev.* Gloria Romanorum Ant.; 21.5 mm.

BYZANTINE.

Justin I: *B.M.C.*, *Imp. Byzantine Coins*, no. 20. Justinian I: *B.M.C.*, 285; *B.M.C.*, 316. Sixth century uncertain: *Obv.* Bust r.; *Rev.* Monogram; 15.0 mm. Heraclius and Heraclius Constantine: *B.M.C.*, 168. Heraclius, Heraclius Constantine, and Martina: *B.M.C.*, 271. Michael IV: *B.M.C.*, 6. Michael IV: *B.M.C.*, 10; 3 spec. Theodora: *B.M.C.*, 6; 6 spec. Theodora: *B.M.C.*, 6?; 2 spec. Constantine X: *B.M.C.*, 10. Constantine and Eudocia: *B.M.C.*, 18-31; 3 spec. Michael VII: *B.M.C.*, 24-6. Nicephorus III: *B.M.C.*, 12-21. John II: *B.M.C.*, 70 seqq.

MEDIEVAL COINS.

See Mr. Derek Allen's article on p. 200.

ORIENTAL COINS.

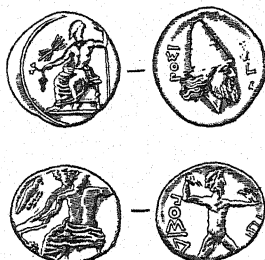
Uncertain Seljuk?, 12-13th cent.: Æ; 4 spec. Uncertain Seljuk?, 12-13th cent.: lead seal. Aiyubid: al-Malik al-Zahir, early 13th cent.: Æ. Aiyubid: al-Malik al-Zahir (Aleppo), early 13th cent.: Æ. Aiyubid: al-Malik al-Aziz (Aleppo), early 13th cent.: Æ. Aiyubid: al-Malik al-Aziz (uncertain mints), 13th cent.: Æ; 2 spec. Mameluke, c. 1350 (Damascus): Æ

¹² Details uncertain.

plated. Abbasid governor, 9th cent.: Æ .¹⁴ Uncertain Abbasid, 9th cent.: Æ ; 2 spec. Uncertain Abbasid, governor (Mansur), 11-12th cent. Uncertain Mongol?, 14th cent.: Æ . Uncertain Turkish?, 13th cent.: Æ ; 2 spec. Uncertain Turkish?, 15th cent.: Æ ; 2 spec. Muhammed IV, 1648-87 (Constantinople): R . Mustafa III (Cairo, A.H. 1187 = A.D. 1773): R . Armenia Hethum I, 1244-70: R ; 2 spec. Armenia Hethum I and Isabella: R ; 2 spec. Armenia Hethum II, 1289-93: Æ ; 3 spec.

APPENDIX.

COINS OF POSIDIUM.



1. *Obv.* Baal seated on throne three-quarter l., head r., wrapped in himation from the waist down; he holds in r. vine-branch with grapes, and leans l. on sceptre; above on l., thunderbolt; linear circle.

Rev. Bearded head of Cabirus r., in conical cap; behind, $\Pi\text{O}\Sigma\text{I}$; in front, ΔE ...
 R 14.0 mm.; 64.7 gr. (4.19 grm.).

2. *Obv.* Baal, similarly clad, seated l. on throne, head and shoulders facing; he holds in r. vine-branch, corn-ear, and eagle, and leans l. on sceptre.

¹⁴ Ibrāhīm ibn Sā'ima(?). See *Zeitschrift für Numismatik*, 1895, p. 97.

Rev. Zeus Casius striding r., brandishing thunderbolt in r. and holding eagle(?) on outstretched l. arm.; behind, ΠΟΣΙΔ down; in front, traces of letters.
 Æ ↑ 15.0 mm.; 25.0 gr. (1.62 grm.).

These appear to be the only two coins of Posidium known. No. 1, which is illustrated from an electrotype in the British Museum, was found near Beyrout and eventually passed into the Greenwell Collection, though it is not mentioned in Regling's catalogue. It was first described by S. M. Alishan (*Num. Chron.*, 1898, p. 124) and fully discussed by Hill (*ibid.*, p. 246). He points out the origin of the Baal type in Tarsus: the reference in the thunderbolt, which appears later as a type at Seleucia, to Zeus Casius, the god of the neighbouring mountain: and the presumption afforded by the Attic standard that the mint was not Cilician but Syrian. If Al-Mina is Posidium, the regular use of "owl" tetradrachms, both Athenian and home-made, which the excavations have revealed, makes the employment of the Attic standard for the city coinage even more natural. From a manuscript note in the British Museum Head appears to have doubted the genuineness of the coin, but Hill accepted it without question, and pointed out the likeness of its fabric to that of the coins of Alexander's generals struck in Syria and further Asia. Its types and inscription are confirmed by no. 2, which is beyond doubt. This coin came to the Museum in 1891, but was placed under Poseidonia in Lucania. Hill, therefore, was not able to use it in discussing no. 1, though he later recognized its true attribution, and it has remained unpublished till now. The work is much cruder than on the other, and the detail somewhat difficult to determine. The obverse type is slightly varied and derives directly from a Tarsian stater of Mazaeus (*B.M.C.*, no. 51 seqq.). On the reverse, the likeness of which to the type of Poseidonia is a curious coincidence, the eagle is not certain, though the thunderbolt is quite clear. It is a conventional Zeus type such as appears e.g. on fourth-century coins of Messene (*B.M.C.*, *Pelop.*, p. 109), and must have the same reference as the thunderbolt on the drachm—to Zeus Casius. Both coins must have been made in the third quarter of the fourth century B.C.

E. S. G. ROBINSON.

XII.

A HOARD FROM "SIDON" [BENI-HASSAN].

THE MacGregor Collection of Egyptian Antiquities which was sold by Messrs. Sotheby on 26 June 1922 and following days contained a few Greek coins. Lot 724 is described as comprising 2 tetradrachms and 1 drachm of Athens and 8 "fragments of silver ingots evidently from a refiner's or money-changer's shop; found at Sidon with the coins". After the sale this lot came to the Museum, and though, when it did so, one of the tetradrachms and one of the ingots was lacking, it still seems to be of sufficient interest to deserve rescue from the oblivion of a sale catalogue. The tetradrachm, which is little worn and weighs 264.3 gr. (17.13 grm.), is of neat, careful style with a smallish head, not long after 450 B.C. The drachm, which is a little rubbed and weighs 63.4 gr. (4.11 grm.) and has a chisel-cut, is of curious style and exhibits a unique peculiarity. Unlike all other drachms of the first period with full-face eye it has a crescent-moon on the reverse between owl and olive-spray.¹ The evidence from Al-Mina² shows that while Athenian tetradrachms were common in this part of the world the smaller denominations were rarely used; the present drachm in view of its peculiarities must, I think, be of local manufacture, and copied from the tetradrachm on

¹ The crescent-moon only appears on drachms in the second period with the profile eye: Svoronos-Pick, *Monnaies d'Athènes*, Pl. 21, nos. 27-42, where it is the rule.

² See p. 183 above.

which of course the crescent is invariable.³ The chisel-cut shows that already in ancient times some one had questioned its regularity.

Of the "ingots" only one is complete, and even this has been nearly cut in two by a chisel-blow. It is a circular "dump", smooth on the one side, rough on the other. Of the remainder three are segments of similar though larger dumps, the other three are so fragmentary that the shape of the original cannot be ascertained. Their measurements and weights are as follows:—the complete piece (1) $28.0 \times 28.5 \times 5.0$ mm., 340 gr. (22.03 grm.); the three segments (2) $50.0 \times 23.0 \times 7.5$ mm., 626.8 gr. (40.60 grm.); (3) $29.5 \times 28.0 \times 8.0$., 451.7 gr. (29.25 grm.); (4) $25.0 \times 17.0 \times 8.0$ mm., 233.4 gr. (15.12 grm.); other fragments, (5) $30.0 \times 20.0 \times 9.5$ mm., 585.1 gr. (37.91 grm.); (6) $19.5 \times 15.5 \times 15.0$ mm., 433.2 gr. (28.12 grm.); (7) $15.5 \times 10.5 \times 11.0$ mm., 102.7 gr. (6.65 grm.).

Uncoined silver in ingot form is not uncommon in coin hoards, e.g. in the Taranto hoard and especially in Egypt.⁴ It occurred also in a find from Ras Shamra, not so far from Al-Mina, which Professor Schaeffer communicated to the recent Numismatic Congress and which he will publish in detail elsewhere. The most probable view is that it was not intended to provide raw material for the goldsmith, but circulated as a bullion currency checked by the scales; and it may not be accidental that some at least of the weights of

³ For an *imitation* without the crescent see above p. 186.

⁴ Taranto hoard. *Rev. Num.*, 1912, pp. 30 seqq.; most of the uncoined silver from this find is now in the British Museum. Delta hoards: *Num. Chron.*, 1930, pp. 93 seqq.; *Z.f.N.*, 1927, pp. 1 seqq.; *Journ. Egypt. Arch.*, 1933, p. 119.

our pieces fit roughly into the Attic system: e.g. no. 1 as five drachms, no. 2 as ten, and no. 3 as seven drachms; the small deficiencies could be compensated by make-weights.

Since the above was written I have learned, through the kindness of Dr. J. G. Milne, that the provenance given in the sale catalogue was false, and that the pieces described come from the Beni-Hassan hoard of which he has written in *Rev. arch.*, 1905, p. 257, and *Journ. Egypt. Arch.*, 1933, p. 119. Lots 726-7 which were purchased for the Toronto Museum also certainly come from the same find. The hoard consisted of 21 Phoenician coins (Tyre, Sidon, Gaza), and a drachm and 54 tetradrachms of Athens of which 2 came to the British Museum at the time. It cannot have been buried before the second quarter of the fourth century. Its composition might suggest that though buried in Egypt it had been assembled on the Phoenician coast, though Dr. Milne thinks that the coins of Attic type were minted locally for the rebel Tachos. The drachm and two of the three tetradrachms here are probably fourth-century imitations of some kind, but the remaining tetradrachm is of good mid-fifth-century style and indistinguishable from authentic Athenian issues. In any case it affords an interesting parallel with the currency of Al-Mina described in the preceding article.

E. S. G. ROBINSON.

XIII.

COINS OF ANTIOCH, ETC., FROM AL-MINA.

[SEE PLATE X.]

A SMALL hoard of medieval coins was found at Tell Cheik Yusuf Al Gharbi in Syria by Sir Leonard Woolley in the course of his excavations on what may have been the site of the classical Posidium. There were thirty-eight coins in the find, all except three struck by the princes of Antioch. The coins of Antioch have never been adequately classified.¹ All except two of those in this hoard bear the name Boemund; four princes of this name reigned in succession at Antioch from 1162 to 1268, and up to now there has been no criterion for separating the coins into their respective reigns. The date of burial is therefore better fixed by the coins of other mints found with them. One of these was a French denier of Guillaume I, Lord of Déols, (1203-1233), which was probably brought to the east during the fifth crusade, 1218-1221. This coin was badly worn. Another of the coins was struck by the Armenian king, Hethum I, who reigned from 1226 to 1270. The hoard must therefore have been buried about 1230 or not long after, that is, in the last years of Boemund IV (1208-1233) or the early years of Boemund V (1233-1251). The third coin, not of Antioch, is an anonymous and undated denier of Sidon. Since

¹ For the mint in general, see: Schlumberger, *Numismatique de l'orient latin*, pp. 29-49; de Saulcy, *Numismatique des croisades*, pp. 3-26; Lambros, in *Mélanges de Numismatique*, i, pp. 359-368.

this coin is in mint condition, it cannot have been struck long before the hoard was buried.

The main interest of the hoard lies in the thirty-five coins of Antioch. These all have the reverse legend **ANTIOCHIA**, and the reverse type of a cross with a crescent in the second quarter. Thirty-three have the obverse legend **BOAMVNDVS**, and two the legend **RVPINVS**. All have the obverse type of a helmeted and mailed bust left. Boemund III (1162-1201), the first of the succession of Boemunds, should have been succeeded by his grandson Raymond Rupin, who was still a child when the grandfather died in 1201. His throne, however, was usurped by his uncle Boemund IV (1201-1233). Rupin put himself under the protection of Levon II, King of Armenia, and at intervals throughout the reign of his uncle attempted to restore himself. Only two of these attempts were in the least successful, those of 1205 and 1216. On each occasion Rupin occupied Antioch, or a part of it, for three years. Boemund IV was succeeded by Boemund V, his son (1233-1251), and he in his turn by Boemund VI (1251-1268).

Various types of denier, all more or less scarce, have been attributed to Boemund III. Since 1875 the familiar deniers which occur in this hoard have been attributed to Boemund IV on the ground of their resemblance to the coins of Raymond Rupin,² which can only have been struck in 1205-1208 or 1216-1219. No documents are known relating to the coinage of Antioch.

In this report the coins reading **BOAMVNDVS** have been classified under nine types, between a number

² Schlumberger, in *Mélanges de Numismatique*, i, pp. 275-280.

of which there exist mules. There can be no doubt that type 6 of this classification is the latest in the hoard. There are fifteen specimens of it; it forms, in fact, three-eighths of the hoard. Coins of this type are generally somewhat scarcer than the rest of the series. None of those in this hoard showed signs of wear. In the Tripolis hoard,³ buried about 1221, some ten or more years earlier than this hoard, there were no examples of the type. It must therefore have been issued after 1221 and probably nearer 1230. Five more types can be arranged in a series extending backwards from this, linked to each other in most cases by mules, and in others by similarity of lettering. The earliest of the types so found is that on which the letter A is decorated with annulets at the ends of the top cross-bar. These unusual letters find their closest parallel on some of the deniers of Jerusalem which read **BALDWINVS REX**. The last king of the name of Baldwin died in 1185. There is therefore reason to suspect that these coins were struck in the twelfth century, rather than the thirteenth. This theory is confirmed by the coins of Rupin, the lettering of which resembles most closely Class 5 of this series. It seems impossible to divide the coins of Rupin between the two periods in which he was in power at Antioch. Since two of them occurred in this hoard one may suspect that all the coins bearing his name were struck in the later of the two periods, 1216-1219. It will therefore probably not be far from the truth, if Type 1 be ascribed to Boemund III, Types 2 to 5 to Boemund IV, and Type 6 to Boemund V.

³ Cox, in *A. N. S. Numismatic Notes and Monographs*, No. 59, p. 54.

Three other types reading **BOAMVNDVS** also occur in this hoard. Some of these are as common as the six regular types already mentioned. These three types are related to one another chiefly by the fact that the chain-mail on the obverse is always indicated by crescents facing downwards and by the form of the letter S (**Σ** instead of **Ξ**). On some of these coins the C lacks the characteristic forward projections of the other series. On others the star is six-pointed or the crescent inverted.⁴ Even these coins appear to be related to one another by mules, but in no instance are they muled with the regular series. Their fabric is rougher than that of the others, and the legends are frequently mis-spelt. The same S and certain other details of lettering recur on the coins of Rupin. One might suggest, therefore, that these coins belong to a second, and possibly unofficial, mint; perhaps they were struck for use by Rupin before he felt himself strong enough to issue coinage in his own name. However that may be, it remains certain that these blundered coins, common though they are, do not form part of the regular series. Since two coins of this type occurred in the Tripolis hoard, there can be no doubt that they were struck during the reign of Boemund IV.⁵

⁴ Other coins of Boemund probably belong to this irregular class, for instance, those on which the portrait faces right. The lettering of these suggests that they belong to the middle of the series, and excludes the common view that they were an earlier type. Similarly, the coin reading **BAMVNDVS**, often attributed to Raymond de Poitiers (Schlumberger, pp. 50 and 55, note; Pl. II. 18) is certainly a coin of this irregular class.

⁵ Various other varieties are mentioned in books, particularly in Lambros' article (see note 1). The coins are, however, not sufficiently accurately described to be included in this article.

In the following list, not only the types in the hoard are described, but also the specimens in the British Museum collection. The relative scarcity of early coins in the hoard as compared with the Museum collection tends to confirm the sequence here suggested. The coins from the hoard have been cleaned by electrolysis, and have lost about 12 per cent. of their weight. Comparison of weight can, therefore, only be made with other coins from the hoard and not with the Museum specimens.

TOTALS.

Antioch: Regular Boemund coins . . .	28
„ : Irregular Boemund coins . . .	5
„ : Rupin coins . . .	2
Armenia: Hethum I . . .	1
France: Guillaume of Déols . . .	1
Sidon: Anonymous . . .	1
Total	<u>38</u>

LIST OF COINS.

PRINCES OF ANTIOCH.

I. Regular issues of Boemund III, IV, and V.

TYPE 1 a.

Obv. Mailed bust left; crescent in front, star of five points behind. Chain-mail indicated by crescents facing upwards, eye by a pellet in an annulet. Large lettering; A with annulets on either side of top cross-bar (**⌘**); M and N as N reversely barred (**⌚**); O without pellet in centre (**⦿**); S of three pellets united by two crescents (**⚡**). *Hoard.* B.1

Rev. Cross in headed circle; crescent inverted in second quarter (**⦿**). Lettering as obverse; H and M as N reversely barred; C with two annulets and two forward projections (**⦿**).

✠ BOEMUNDVS

✠ ANTIOCHIA

— 1

Wt. 0.96 gm.

TYPE 1 b.

Obv. As Type 1 a, except that O has usually, but not always, a pellet in the centre (⊙). *Hoard.* B.M.

Rev. As Type 1 a, except that C has, in place of annulets, pellets (⬢).

† BOAIVVDVS † ANTIOCHIA 2 2

Schlumberger, Pl. III, 4. Wt. 0.94, 0.88 (B.M.), 0.76, 0.74 (Hoard) gm. [Pl. X. 1.]

TYPE 1 c.

Obv. As Type 1 b, except that the eye is represented by a pellet and a crescent (◐).

Rev. As Type 1 b, except that there is a pellet on either side of the initial cross.

† BOAIVVDVS † ANTIOCHIA 1 1

Wt. 0.97 (B.M.), 0.80 (Hoard) gm. [Pl. X. 2.]

Mule.

Obv. Type 1 b or c; *Rev.* Type 2 var. For description see below.

† BOAIVVDVS † ANTIOCHIA — 1

Wt. 0.92 gm.

TYPE 2.

Obv. As Type 1 b or c, except that A has four pellets on the cross-bars in place of two annulets (⦿); M and N are represented with a horizontal cross bar (H).

Rev. Lettering as on obverse. H (=N and H) has a pellet on the cross-bar (H). Between the letters I and O & is inserted. On the reverse of the mule above, the A has pellets only at the extremities of the top cross-bar.

† BOAHVHDVS † ANTIOCHIA 2 1

Wt. 0.85 (B.M.), 0.74, 0.72 (Hoard) gm. [Pl. X. 3.]

Mule.

Obv. Type 2; *Rev.* Type 3. For description see below.

† BOAHVHDVS † ANTIOCHIA 1 —

Wt. 0.84 gm. [Pl. X. 4.]

TYPE 3.

Obv. As Type 2, except that M is represented as N and N as H, both doubly barred (**N.H**). The transition is seen on the mule above.

Hoard. B.M.

Rev. Lettering as obverse; still with **⌘** between the letters I and O. No pellets on N or H.

† **BOANVHDVS** † **ANTI[⌘]OCHIA**

— 2

Wt. 1.01, 0.74 gm.

TYPE 4.

Obv. As Type 3.

Rev. As Type 3, except that the **⌘** between I and O is omitted.

† **BOANVHDVS** † **ANTIOCHIA**

3 —

Wt. 0.84, 0.78, 0.67 gm. [Pl. X. 5.]

Mule.

Obv. Type 4; *Rev.* Type 5 (?). For description see below.

† **BOANVHDVS** † **AMTIOENIA**

1 —

Wt. 0.64 gm.

TYPE 5.

Obv. Small, neat lettering with serifs. Portrait shorter and broader. A with only two pellets on top cross-bar (**A**). M and N Roman. O without pellet in centre. S as above (**S**).

Rev. A as on obverse; C as above (**C**); Roman M for N; Roman N for H; O without pellet in centre.

† **BOAMVNDVS** † **AMTIOENIA**

3 —

Wt. 0.75, 0.75, 0.72 gm. [Pl. X. 6.]

TYPE 6.

Obv. Bust broader and cruder; bottom of helmet marked by a straight instead of a beaded line. Eye represented by a single pellet without crescent. Small, neat lettering similar to Type 5, except S which is elongated and without pellets (**S**).

Rev. Lettering as obverse; N and H are Roman.

Hoard. B.M.

† BOAMVNDVS † ANTIOCHIA

15 2

Wt. 1.0, 0.99 (B.M.), 1.05, 0.98, 0.98, 0.90, 0.80, 0.80, 0.78, 0.78, 0.77, 0.77, 0.74, 0.73, 0.69, 0.68, 0.45 (Hoard) gm. [Pl. X. 7.]

Suggested attributions for the above:—

Type 1, Boemund III.

Types 2–4, Boemund IV.

Types 5–6, Boemund V.

II. Irregular issues of Boemund IV (1201–1232).

TYPE 1*.

Obv. General design similar to coins of regular issue, but six-pointed instead of five-pointed star behind the head, and crescent in front of head facing downwards. Chain-mail indicated by crescents facing downwards instead of upwards. A marked with four pellets, but top cross-bar extends outside pellets (A); B with wedge-shaped bulges (B); D with pellet in centre (D); S with two pellets, two wedges, and a central bar (S).

Rev. C is closed by a single stroke (C); N is indicated by H with pellet (H); H and I are united by a cross bar. Between I and O the mark V.

† BOAHVNDVS † ANTIOCHIA

1 —

Wt. 0.72 gm. [Pl. X. 8.]

TYPE 2*.

Obv. As Type 1, but five-pointed star and crescent pointing upwards. Chain-mail indicated by crescents facing downwards.

Rev. As Type 1, but H and I are indicated by separate strokes not united.

† BOAHV--VS † ANTIOCHIA

1 —

Wt. 0.72 gm.

Mule.

Obv. Lettering as Type 3* except B for B; bust as Type 2*.

Rev. As Type 1*.

† BOAIIVIDVS † AHTIVOCHIA

Wt. 0.77 gm. [Pl. X. 9.]

TYPE 3*.

Obv. As Type 1, but a smaller and rounder portrait, and five-pointed star and crescent as on Type 2. A has only two pellets, on either side of the top cross-bar; B is normal; N and M are indicated by II.

Rev. Lettering as obverse; C lacks the projections in front (C).

† BOAIIVIDVS † AHTIOCHIA

Lambros 9. Wt. 0.93, 0.93 gm.

† BOAIIVIDVS † AHTIOCHIA

Lambros 2. Wt. 0.84, 0.72 gm. [Pl. X. 10.]

Totals of coins reading BOAMVNDVS

Hoard. B.M

1 —

— 2

2 —

33 12

III. Coins of Raymond Rupin (1203-1208, 1216-1219).

Type as of Boemund, but fabric rougher and more spread, and lettering larger. Crescents indicating chain-mail face upwards. Eye indicated by a single pellet.

1. † R.V.P.I.N.V.S † AHTIOCHIA

Wt. 0.82 gm. [Pl. X. 11.]

2. † R.V.P.I.N.V.S † — — T.ICHIA

Wt. 0.95 gm.

3. † R.V.P.I.N.V.S † AHTIOCHIA

Wt. 0.97 (B.M.), 0.71 (Hoard) gm. [Pl. X. 12.]

Totals

2 2

ARMENIA.

Hethum I (1226-1270).

Obv. Lion passant guardant right: around inscription.

Hoard.

Rev. Two figures standing facing, holding between them a cross: around inscription.

V. Langlois, *Numismatique de l'Arménie*, p. 54, no. 14.

1

Wt. 2.79 gm. [Pl. X. 13.]

FRANCE, FEUDAL.

Guillaume I Seigneur de Déols (1203-1233).

Obv. Cross in beaded circle; lis in first and third quarters *Hoard.*

Rev. ⬠ Lis in centre.

✠ G V L L I E L M V S ✠ D E D O L I S 1

Dieudonné, *Manuel de Numismatique Française*, iv, p. 98.

Wt. 0.47 gm.

SIDON.

Anonymous Coinage of Thirteenth Century.

Obv. Mosque in circle.

Rev. Cross in circle.

✠ · D · E · S · E · E · T · E · ✠ · D · E · N · I · E · R · 1

Schlumberger, p. 115, Pl. V. 8.

Wt. 0.62 gm. [Pl. X. 14.] Total of hoard 38

In addition to the coins in the hoard described above, a number of miscellaneous medieval coins were found during the excavations. The following is a list of these coins. The references are to Schlumberger's *Numismatique de l'Orient Latin*. For the classification of the Boemund coins of Antioch, see the description of the hoard.

ANTIOCH.

Tancred (1104-1112).

Æ. Schl., Pl. II. 6	.	.	2	Schl., Pl. II. 8	.	.	1
„ Pl. II. 7	.	.	2	„ Pl. V. 1	.	.	2

Roger (1112-1119).

Æ. Schl., Pl. II. 4	.	.	.	.	.	.	.	1
„ Pl. II. 12	.	.	.	.	.	.	.	1

Boemund III (1162-1201).

Æ. Schl. Pl. III. 1	.	.	3	Æ. Hoard Cl. 1 b	.	.	1
„ Pl. III. 2	.	.	1	„ Cl. 1 c var.	.	.	1

The last coin is fragmentary: it is identical, where visible, with Cl. 1 c, except that there is no crescent in front of the prince's face.

Boemund IV (1201-1232).

Æ. Hoard, Cl. 2	.	.	1	Hoard, Cl. 3*	ÆIT	.	2
„ Cl. 3	.	.	4	„ Cl. 3*	ÆIT	.	2

Boemund V (1233-1251).

Æ. Hoard, Cl. 6	.	.	4	Uncertain class	.	.	1
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Raymond Rupin (1205-1208 and 1216-1219).

Æ. ✠:R:V:P:I:N:V:S: ✠	ÆNTIOCNIA	1
✠:RV:P:IN:V:S: ✠	ÆNTIOCHIA	1
(Annulet and crescent in front of bust.)		
✠:R:V:P:I:N:V:IS: ✠	ÆMTIOCHIA	1
✠:R:V:[]V&S: ✠	ÆMTIOCHIA	1

Anonymous Coinage of Antioch.

Æ. Schl., Pl. III. 17	1
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EDESSA.

Counts of Edessa, third quarter of eleventh century.

Æ. Schl., Pl. I. 13	1
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JERUSALEM.

Jean de Brienne, at Damietta (1219).

Æ. Schl., Pl. III. 31	1
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TRIPOLIS.

Raymond II-III (c. 1180-1190).

Æ. Schl., Pl. IV. 9	1
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Boemund IV-VI (1201-1274).

Æ. Schl., Pl. IV. 17 var.	✠ BΛMVND COMS ✠	✠ CIVITAS TRIPOL	2
Uncertain coin, perhaps the same as the above.	.	.	1

DEREK ALLEN.

XIV.

A HOARD OF RADIATE COINS FROM THE VERULAMIUM THEATRE.

[SEE PLATES XI-XXX.]

IN view of its composition particular value attaches to this hoard, since the lower limit of date for its deposition, *circa* A.D. 300, is attested by external archaeological evidence.

The hoard (Pl. XI) contains 616 specimens which measure 8 millimetres or less in diameter and is therefore substantially, though not exclusively, a hoard of *minimi*. The obverses are radiate heads or busts, left or right, of which the prototypes are familiar during the period A.D. 258-296.

The theatre hoard of radiate *minimi* is the first of such hoards in Britain to be dated closely by archaeological association, and it may be said at once that the internal evidence as to date from the hoard itself is entirely consistent with that which is given to it by its archaeological horizon.

Date of the hoard : external evidence.

Like other buildings at Verulamium the theatre underwent extensive reconstruction at the end of the third century A.D.¹

The date of this reconstruction is abundantly indicated by 229 coins directly associated with the new

¹ For full details and lists of associated coin-evidence, see Miss Kathleen Kenyon in *Archaeologia*, lxxxiv, pp. 236 ff.

work, of which 206 are of the radiate type of the second half of the third century and include 125 coins from regular mints. The latest coin among the 229 is a *follis* of Diocletian struck between A.D. 295 and 305;² it is practically in mint condition and retains the greater part of its silvering. It was found in the make-up of the Period IV orchestra floor in association with 45 other coins including 37 of the second half of the third century and one radiate minim of the type of the hoard now under discussion. Apart from this *follis* the latest coins in the 229 associated with this phase of rebuilding were five *antoniniani* of Carausius.

The date of the new work cannot be far removed from A.D. 300, and is prior to the arrival of Constantinian coins in Britain.

The subsequent history of the theatre may here conveniently be summarized, since it shows that Constantinian coins were eventually to find their way to the theatre in considerable quantities.

Miss Kenyon notes one structural alteration to the theatre in the fourth century—the demolition of the portico on the east side of the south wing and the laying down of a yellow gravel, containing a coin of Constantius II or Constans (A.D. 345–361) over its site. The theatre was in use therefore at that date.

But soon afterwards the theatre seems to have become a rubbish-dump. Various deposits,³ notably a lower brown and an upper black layer, accumulated to a depth

² Of this coin, Mr. Harold Mattingly writes: "The Lugdunum *follis* of Diocletian is probably near the end rather than the beginning of the period A.D. 296–305."

³ A further 809 fourth-century coins were found in the surface soil immediately above the "dump" layers.

of 5 feet over orchestra, gangways, and stage. Over 2,000 coins, mainly of fourth-century date, were included in these strata; the latest (a small number in proportion to the total) were 25 of the House of Theodosius.

In this connexion the evidence of structural alterations to the *temenos* of the temple west of the theatre (and excavated, like it, in 1935) is of interest.⁴ Mr. Lowther notes that the walls of the *temenos* were rebuilt into a black deposit containing 149 coins of which the latest were 11 of the House of Theodosius. At this time (c. A.D. 400), the eastern entrance to the *temenos*, i.e. that facing upon the theatre, was demolished and the new walls were carried across and so blocked its former opening, whilst a new entrance was constructed at the western end, i.e. in a position *away* from the theatre. That the theatre was abandoned at this period is further emphasized by Mr. Lowther's stratigraphical equation of his "black" level into which the new *temenos*-wall was built with the upper black deposit, which has been already noted, over the derelict theatre.

In summary the evidence from the two structures would show:—

1. A substantial rebuilding of the theatre at a date not far removed from A.D. 300.
2. Minor structural alterations to the theatre about the middle of the fourth century, indicating that it was still in use at that period.
3. The derelict nature of the theatre-area when it was used as a rubbish-dump. The evidence from the

⁴ A. W. G. Lowther, *Antiquaries Journal*, xvii, 33.

temple implies that the theatre was so used, not in post-Roman times, but during the later (and continuous) occupation of the area in the late fourth or at latest, early fifth century. The abundance of fourth-century coinage found stratigraphically above the stage-floor is of considerable importance in estimating the moment at which the concrete floor, below which the radiate hoard was found, was laid down. Had it been constructed at any date much later than that which the coins it seals indicate, the material below it could not have failed to incorporate some of the fourth-century money which lay thickly above it.

It will now be profitable to consider the coins found in close association with the hoard. As a part of the work of renovation in Period IV (c. A.D. 300) a new concrete floor was laid down upon a solid basis of earth containing pottery, food-bones, and débris. Nine inches below the cement surface the present hoard was discovered in a conglomerate mass suggesting that it had been deposited in a purse or other container. Close by, in exactly the same kind of earth and in so restricted an area as to suggest another hoard, lay 144 coins. Of these, 126 are directly referable to the second half of the third century A.D. The latest datable coins are two of Carausius, and five are radiate *minimi* of hoard-type. A further 25 coins were present in the remainder of the levelling material, the latest being one of Tetricus II. There is here ample evidence of the homogeneity of the new floor-basis.⁵

In short, the latest material for dating the hoard consists of these coins of Carausius which are themselves

⁵ *Archaeologia*, lxxxiv, 237.

in independent association with radiate *minimi* of hoard-type.

The external archaeological evidence for the date of the hoard is incontrovertible. It must have been deposited prior to a date not far removed from A.D. 300.

The composition of the hoard.

The hoard consists of about 800 coins, segments, clippings or fragments of coins. Since the hoard is illustrated in its entirety, it is unnecessary to record in detail the variations in size and genre which it includes, but a few points may be noted.

1. 44 flans measure from 4.5-5 mm. in diameter (e.g. no. 609).

2. 486 flans vary in size from 5-7 mm. in diameter (e.g. nos. 2, 3, &c.).

3. 86 flans range from 7-8 mm. in diameter. These are all moderately circular in form and the flans are substantial.

4. At least 80 specimens belong to the "barbarous" or "local imitation" category which Mr. Webb accepts as having mixed freely with the official coinage during and after the Gallic Empire, but particularly during the reign of the Tetrici.⁶

In manufacture almost every expedient is present.

1. *True flans.* Prepared flans were used not only for the larger coins but seemingly with surprising consistency for the majority of the smaller ones. This would appear especially in the case of no. 325 where, unless the reverse *Pietas Aug.* was cut on a very much larger face than was necessary, the flan must have been

⁶ P. H. Webb, *M. and S.*, V, ii, p. 319.

previously prepared. This particular specimen also gives with surprising accuracy the intended dimensions (6.5 mm.) of the finished design. Some specimens suggest the use of prepared flans, made perhaps merely by flattening hot globules of metal. There is neither the interior decay, the inequality of thickness nor the thick sideways thrust, noted on many of the Lydney *minimi*,⁷ to suggest that the flans were cut from drawn rods of metal.

2. *Flans cut from sheet-metal.* This method is illustrated almost exclusively by the large "barbarous radiates" (e.g. nos. 642 ff.). The die in most (though not all) cases would appear to have been of approximately normal size, so that only a part was recorded on the flan.

3. *Clipped coins.* It is difficult to tell in all cases whether a coin has been cut before or after striking; but it is plain to the novice that the reverse of no. 488 has been struck with a normal 3Æ die and subsequently cut down; the obverse head, on the other hand, is unusually small even for a barbarous radiate.

4. *"Tailed" coins.* Hot drips of metal, flattened before striking, seem to have been used for some of the coins, e.g. no. 456, where the "tail" still exists. The "tail" on no. 498 would appear to be the result of hurried and careless cutting from a larger flan or sheet of metal before striking.

5. *Cracked coins.* The cracks in some coins may suggest that the metal was allowed to cool too long before flattening and striking.

There are at least a dozen flans cut square to a width

⁷ *Lydney*, Research Report of the Society of Antiquaries, no. IX, p. 130.

of 8 mm., notably nos. 551 and 684. Round and triangular clipped specimens occur, the latter presumably the deliberate cutting down of a larger flan. Whether these and segments of large coins indicate an attempt at conformity with the smaller coins is uncertain in view of the infinite variations in weight; they certainly emphasize the scarcity of metal and the consequent husbanding of it which the whole hoard exemplifies.

In fact everything from a true flan to the veriest piece of scrap, provided that it recieved some part of a stamp on at least one face (and usually on both) seems to have satisfied the requirements of the issuing "authority".

The hoard has not resolved itself for classification by size or weight into "denominations" or categories such as seemed present in the Lydney hoard. Classification has therefore been attempted on the basis of the reverse types.

In summary, that classification shows, where the design is recognizable, either the true type, some element of the type, or a mixture of several types of a comparatively limited series of reverse designs, all of which are to be found on the official issues of the Roman and Gallic Emperors between A.D. 258 and 311. Where doubt exists, it is a doubt, for instance, as to which of the numerous standing figures within that period it was intended to portray. There is no hint of a Constantinian prototype in any reverse, or of any prototype which need necessarily be later than 296. Indeed the official or local issues, which have been chosen to illustrate the series, belong to Victorinus, Postumus, Tetricus I, Tetricus II, or Claudius II Gothicus, and are here illustrated through the kindness of

the Keeper of the Department of Coins and Medals at the British Museum, to whom I am indebted for the casts. They are as follows (Pl. XII):—

1. **CLAUDIUS II.** *Rev.* **CONSECRATIO** Altar.
M. & S., V, i, p. 233, nos. 259 ff.
2. **CLAUDIUS II.** *Rev.* **CONSECRATIO** Eagle standing towards left on thunderbolt, body front, head right.
M. & S., V, i, pp. 234 ff., nos. 265 ff.
3. **TETRICUS II.** *Rev.* **PIETAS AVGVSTOR** Priestly emblems.
M. & S., V, ii, p. 423, no. 258.
4. **TETRICUS I.** *Rev.* **LAETITIA AVG N** Laetitia standing left, holding wreath and anchor.
M. & S., V, ii, p. 408, no. 90.
5. **TETRICUS I.** *Rev.* **COMES AVG** Victory standing left, holding wreath and palm.
M. & S., V, ii, p. 407, nos. 56 ff.
6. **TETRICUS I.** *Rev.* **SALVS AVG** Salus standing left, holding rudder or anchor and feeding out of patera snake coiled round altar.
M. & S., V, ii, p. 410, nos. 121 ff.
7. **VICTORINUS.** *Rev.* **SALVS AVG** Salus standing right, feeding snake held in arms.
M. & S., V, ii, p. 393, nos. 65 ff.
8. **VICTORINUS.** *Rev.* **PROVIDENTIA AVG** Providentia standing left, holding wand over globe and cornucopiae.
M. & S., V, ii, p. 392, nos. 61 ff.
9. **TETRICUS I.** *Rev.* **SPES PVBLICA** Spes advancing left, holding flower and raising skirt.
M. & S., V, ii, p. 411, no. 135.

10. TETRICUS II. *Rev.* SPES AVGG Spes advancing left,
holding flower and raising skirt.
M. & S., V, ii, p. 424, nos. 270 ff.
11. TETRICUS I. *Rev.* FIDES MILITVM Fides standing
left, holding two standards.
M. & S., V, ii, p. 407, nos. 68 ff.
12. VICTORINUS. *Rev.* PIETAS AVG Pietas standing
left by altar, holding patera and box
of perfume.
M. & S., V, ii, p. 392, nos. 59 ff.
13. TETRICUS I. *Rev.* FORTVNA AVG Fortuna stand-
ing left, holding rudder and cornu-
copiae.
M. & S., V, ii, p. 407, no. 73.
14. POSTUMUS. *Rev.* VICTORIA AVG Victory walk-
ing left, holding branch and spear.
M. & S., V, ii, Pl. XV, no. 11, p. 355,
no. 229.
15. TETRICUS I. *Rev.* HILARITAS AVGG Hilaritas
standing left, holding long palm and
cornucopiae.
M. & S., V, ii, p. 408, nos. 79 ff.
16. TETRICUS I. *Rev.* VIRTVS AVGG Soldier standing
left, leaning on shield and holding
spear.
M. & S., V, ii, p. 411, no. 148.
17. VICTORINUS. *Rev.* INVICTVS Sol advancing left,
raising right hand and holding whip in
left hand.
M. & S., V, ii, p. 396, nos. 112 ff.
18. TETRICUS I. *Rev.* PAX AVG Pax standing left,
holding olive-branch and vertical
sceptre.
M. & S., V, ii, p. 409, nos. 100 ff.

19. VICTORINUS. *Rev.* PAX AVG Pax standing left, holding olive-branch and transverse sceptre.
M. & S., V, ii, p. 397, nos. 116 ff.
20. POSTUMUS. *Rev.* SAECVLO FRVGIFERO Winged caduceus.
M. & S., V, ii, p. 344, no. 84.
(Scarce. Mint of Lugdunum.)
21. POSTUMUS. *Obv.* IMP C POSTVMVS P F AVG
Bust radiate, draped, right.
Lugdunum, Cologne, and Mediolanum.
22. VICTORINUS. *Obv.* IMP C VICTORINVS P F AVG
Bust, radiate, cuirassed, and draped right.
Cologne and southern mint.
23. TETRICUS I. *Obv.* IMP TETRICVS P F AVG Bust, radiate, cuirassed, right.
24. TETRICUS II. *Obv.* C PIV ESV TETRICVS CAES
Bust radiate and draped right.
25. CLAUDIUS II. *Obv.* DIVO CLAVDIO Bust, radiate, right.

The following eighteen plates, which illustrate every coin, segment, or scrap derived from the cleaning of the corroded mass shown in Pl. XI, speak for themselves. The arrangement (as one would call it, rather than classification) has not been made without some heart-burning and indecision, and no emphasis is laid upon it. Many identifications are indeed certain; but whether specimens placed near the certain reverses belong properly to the series is often a matter of speculation. There has, therefore, been a definite avoidance of subjective speculation in "classifying" the doubtful reverses. Many might fit easily, on one or another detail, into several of the series of half-understood

or unintelligently observed prototypes. The writer's interpretation is considered to be of less moment than the illustration of the coins.

Pl. XIII, nos. 1-42 (cf. Pl. XIV, no. 1). The altar of the *Consecratio* type, with and without flames. The face of the altar is decorated with five dots, and a chain, or curved lines; five dots alone; four dots with a central cross; a central cross alone; one dot or merely vertical lines conforming to the curve of the altar-sides. In every case the design is too big for the flan.

Nos. 43-46 and perhaps 47-48 are interesting and may be derivative from the altar-type. Nos. 43 and 44 are almost die-identities both in obverse and reverse; a similar reverse appears on no. 45 but the obverse head is from a different die.

Nos. 49-58 are barbarous renderings of the same reverse altar-type. It may here be noted that the sprawling, illiterate versions of a type are found more frequently on the thin clipped (though often quite large) fragments of barbarous 3 *Æ* than on the *minimi* proper. It would appear that there was a considered effort on the part of the die-cutter to produce a neat and thoughtful design approximating in some degree to the size of the small flan and incorporating the most noticeable feature of the prototype.

Nos. 59-92 are barbarous versions of the eagle type of Claudius II *Consecratio* coins. Attention may be drawn to no. 89, which shows a very stylized eagle and no. 92, which approximates to a human figure type.

Pls. XVI-XVII and XVIII-XIX, nos. 93-265 are all of *Pietas Augustor.* type with sacrificial implements. Nos. 155 and 156 and nos. 176 and 177 seem to be

reverse die-identities, the former pair having obverse identical also. Most examples retain traces of the other implements, besides the ewer, and are thus to be put in Mr. C. H. V. Sutherland's Class A.⁸

Nos. 266-281 all seem to be derived from the *Laetitia* type with wreath and anchor, although some may be *Comes Aug.* with victory type; barbarous lettering occurs on two of the larger specimens (nos. 266 and 272). No. 282 is clearly a *Salus* type with snake rising on the left; the altar is doubtful. Nos. 283-288 seem to be versions of this type, although no. 286 may be of *Providentia Aug.* type. Nos. 290-298 are of the *Spes* type with a flower, which is well seen in no. 291. No. 289 may be of the same type, but like no. 299 it is doubtful.

Pls. XX-XXI. There are derivatives from a number of types on this plate. No. 300 is plainly of the *Fides Militum* type. Nos. 301-307, 310, 312-317, also seem certain, but the remainder down to no. 324 are more doubtful. Nos. 315 and 316 seem to have identical obverse and reverse dies. Nos. 325 and 326 copy the *Pietas Aug.* type sacrificing at an altar, as do nos. 327-328. Nos. 329-346 all retain traces of either rudder or cornucopiae or of both, and seem to be of the *Fortuna Aug.* type, which is most clearly seen in nos. 336-337. No. 347 is of *Victoria Aug.* type and is followed by nos. 348-353, which all have traces of a winged figure of the same type, although in the cases of nos. 348-350 the figure appears to be moving right. The *Hilaritas Aug.* type with long palm and cornucopiae appears in nos. 354-362. No. 363 is of *Virtus Aug.* type with shield and spear, and nos. 364-372 seem to be the same.

⁸ *Num. Chron.*, 1934, 101.

Pls. XXII-XXIII, nos. 373-451 all appear to be of *Invictus* type of Sol radiate moving left with whip and hand raised. The distinctive features, viz. radiate head, whip, raised hand, nude body, and sometimes a star in the field left with or without V, often enable identification to be made of an otherwise featureless coin. No. 376 shows the radiate head, although, as in some other instances, the figure is moving right instead of left. The whip is clear on nos. 394-397, and nos. 413-415, especially no. 414. The raised hand is seen in nos. 389-394 and many others. The star appears on nos. 389-407, &c., and with a V on no. 434 is the only means of identification of that coin. Nos. 396 and 397 seem to be die-identities, as do nos. 437 and 438, which with nos. 435 and 444-445 are examples of an individual style.

Pls. XXIV-XXV, nos. 452-467 copy the common *Pax Aug.* type with branch and upright sceptre. No. 468 is only semi-barbarous, and is of the *Pax Aug.* type with transverse sceptre, as are nos. 469-477. Nos. 472 and 473 seem to be die-identities on obverse and reverse. Nos. 478-493 apparently show *Pax* holding a short palm and cornucopiae, which is best seen on no. 479. The remainder on this plate, nos. 494-525 appear to be of one of these *Pax* types. In some, such as no. 516, a cornucopiae seems to be represented.

Pls. XXVI-XXVII, nos. 526-529 show in miniature the winged caduceus type of *Saeculo Frugifero*, which occurs on coins of Postumus (M. & S., 84 and 250). No. 530 has a radiate head on both obverse and reverse. The remainder on this plate can be only vaguely attributed to types in a few instances. No. 539 appears to have an altar of Claudius II *Consecratio* type as well as a human figure. No. 541 seems to show a man within

a gabled building. No. 559 has a curved line like a snake at the left. Nos. 606-612 all show part of a figure with sceptre or ensign upright on the left. This might be *Fides Militum* type. Many of the others clearly have part of a usual design, but the precise one is uncertain.

Pls. XXVIII-XXIX. This group comprises in the main larger coins and clipped fragments. Some show typical figure subjects quite unattributable to types; others have degenerated into mere patterns like no. 641.

Pl. XXX. This is of the typical *minimi*, but the designs cannot be attributed to any particular type. Some are very worn and a few are blanks.

Obverse portraiture.

With very few exceptions the obverse radiate head is to the right. Many of the heads, in spite of the small size, are very well rendered. As is so often the case in larger barbarous radiates, the obverse shows greater care and also better preservation, no doubt on account of slightly higher relief.

In some cases it is possible to detect portraiture, i.e. the copyist has taken care to copy the individual characteristics of the prototype, e.g. the hook-nose of Victorinus, the snub-nose of Tetricus I or Postumus, and the high cheek-bones of Claudius II. No. 33 is clearly Claudius II, no. 93 may even be Carausius, nos. 375 and 384 seem to represent Victorinus, and many are certainly like Tetricus I. There is a dearth of beardless portraits for Tetricus II, although there are many sacrificial-implements reverses, which are common for him. It does not seem, however, that the copying of obverses and reverses consistently went

together, i.e. the obverses of the *Consecratio* type are not always like Claudius II, the obverses of the *Invictus* type are not always like Victorinus, but they frequently seem to correspond vaguely. The copyists were clearly methodical, but they were also eclectic.

Place of manufacture.

It will be noticed that the reverse types which occur amongst the *minimi* are those which commonly occur in this country amongst legitimate issues and amongst barbarous copies, e.g. the altar and the eagle consecration coins of Claudius II, the *Pietas Augustor.* of Tetricus II, the *Invictus* type of Victorinus, and the varied standing figure types headed by *Pax*. In this way this agrees with similar hoards elsewhere, e.g. the hoard from the West of England, published by Mr. C. H. V. Sutherland.⁹ This might suggest that they were made in this country; but against this must be set the fact that the workmanship is quite alien to that of the usual barbarous radiates found in this country. It seems better, therefore, at present to suggest that they were not of British manufacture.

The significance of the hoard.

It has long been recognized by field-workers not only that the so-called "provincial issues" or "barbarous copies" of late third-century coins were in use almost as soon as the products of the authorized mints, but also that minims were part of the currency whether with or without official sanction. That knowledge, hidden in obscure excavation reports has, of necessity,

⁹ *Num. Chron.*, 1934, 92 ff.

been slow to find acceptance among numismatists.¹⁰ As recently as 1934 (*Num. Chron.*, 1934, 92 ff.), in a description of a hoard of radiate *minimi* from the West of England, it was possible for the author to postulate that "we might be justified in saying that these *minimi* do not fall before A.D. 450."

It may be repeated that the evidence for a third-century date for the Theatre hoard is incontrovertible—a fact which must, to a considerable extent, re-orientate the whole problem of this unofficial coinage.

TESSA VERNEY WHEELER.

Mrs. Wheeler was at work on this paper shortly before her untimely death, and Dr. Wheeler asked me to attend to its publication. I found that the larger portion was already written, and, apart from making a few verbal alterations, I have left the material untouched. The detailed description of the plates had been done only as far as coin no. 58. The remainder I have supplied, relying upon manuscript notes and the plates themselves. The remarks on what I have called "the significance of the hoard" were attached by Mrs. Wheeler to another short paper on the hoard (the text of a lecture), but, as I several times discussed the matter with her, I know that they represent her considered view on the subject.

The controversy regarding the date of radiate *minimi* is likely to continue for many years, yet the

¹⁰ E.g. *Segontium Report, Y Cymmrodor*, xxxiii, pp. 112-113. In Hoards II and III (p. 112) *minimi* were associated with coins not later than Carausius.

present seems an occasion for clarifying the issue to a certain extent.

There can be no doubt that this Verulamium hoard was concealed c. A.D. 300. The archaeological evidence, attested by tried and reliable witnesses, seems to me decisive. Moreover, it is based not upon a single observed fact, but upon several, which independently lead to the same conclusion. We must, therefore, agree that radiate *minimi* did in fact see the light a very short while after their prototypes were issued. Whether they were copied from legitimate issues or from barbarous radiates is immaterial, since all are agreed that the latter were contemporaneous with the former,¹¹ just as barbarous *Fel. Temp. Reparatio* coins were certainly in use during the period of minting of legitimate issues of that type.¹²

This does not, necessarily, mean that all radiate *minimi* date from the late third century. It is clear from such an occurrence as that of the fine Carausius and other radiates in use in c. A.D. 400 at Bourton-on-the-Water,¹³ and from the presence of radiate issues in Saxon graves,¹⁴ that these coins were still in use, or again in use, at those periods. They would, therefore, be available for copyists, and the radiate head on some *sceattas* shows that such copying occurred.

Thus it seems that we must be prepared for hoards

¹¹ Mattingly and Sydenham, *Roman Imperial Coinage*, V, ii (P. H. Webb), p. 319.

¹² *Lydney*, Research Report of the Society of Antiquaries, no. IX, p. 115.

¹³ *Num. Chron.* (1935), p. 275 ff.

¹⁴ Through the kindness of Mr. F. C. Wellstood and Mr. G. C. Dunning I have recently seen a worn Tetricus I (*Spes* type) from a Saxon hut site at Alveston, near Stratford-on-Avon.

of varying dates, some deposited in the late third century, others at the close of the Roman occupation or later. Stylistic arguments, especially those which deal with the gradual debasement of good workmanship, are notoriously uncertain, and it seems safer to draw conclusions regarding date as far as possible only from well-attested and dated deposits. The eagerly awaited report on the Richborough 1931 barbarous radiate hoard should be of great assistance in this respect.

B. H. ST. J. O'NEIL.

MISCELLANEA.

MICHEL P. VLASTO.

This year death has been cruel to Greek Archaeology. After the loss of Humfry Payne, another place is left empty by the sudden death of an exceptional man who, although his life was principally taken up by business, devoted to archaeology every moment he could spare.

When I first met Michel Vlasto, before his final return to Greece after many years spent abroad, I immediately noticed that practical sense and natural scientific instinct blended in him to form an unusually fine and delicate character. But what raises him to a higher intellectual plane and commands the respect of the impartial observer who seeks to estimate the place occupied by each citizen in the life of his country, is that he never made of money the sole purpose of his life, but always endeavoured, by means of spiritual occupations, to satisfy those needs of his soul which a material existence could not supply.

Vlasto, who had been drawn away by business from the path he would have desired to follow, hastened back to it as soon as he had achieved the necessary financial independence. Whilst following his profession, he had already formed a collection of ancient Greek coins. He gradually came to specialize in the coins of Tarentum, and showed such discrimination and such knowledge of numismatic questions, that he succeeded in forming a unique collection, admirable both for the variety of the pieces and for the excellence of their preservation. Perseverance alone would not have achieved this result without scientific knowledge; and what places Michel Vlasto above ordinary collectors and amateurs is that he was a real scholar. Self-taught though he was, the many articles on Greek coins which he contributed to British and Hellenic periodicals showed a genuine gift for numismatics; particularly those on the coins of Tarentum and of Alexander, son of Neoptolemus, King of Epirus. In 1922, he published, in the series of *American Numismatic Studies*, a work on "Taras the Colonist" which summed up his long studies of one section of Tarentine coins.

The work of Michel Vlasto was so highly appreciated by the best numismatists that the French Academy of Inscriptions awarded him the Allier de Hauteroche prize, and Italy invited him, a few years ago, to superintend the arrangement of the numismatic section of the Taranto Museum.

When he finally settled in Greece, Vlasto brought with him his collection of coins, and also a small but choice collection of other antiquities. He made himself a high position in business circles in Athens. But his numerous pursuits did not divert his mind from archaeology. On the contrary, he devoted himself to it with new vigour—with the zeal, one might say, of a young man.

He applied himself to the study of vases; he made a fine collection of them, and was preparing a full catalogue. It is remarkable how easily Michel Vlasto made a name for himself among those interested in that highly specialized branch of archaeology. True scientific instinct, unusual industry, and a genuine love of learning, these alone enabled him, in the midst of his many business engagements and social duties, to satisfy his inner vocation.

Michel Vlasto rendered a great service to his country when he founded, two years ago, "the Society of Friends of the Athens Museum", which endeavours, by means of contributions and subscriptions, to save important antiquities for the nation, and under his able and energetic presidency has already done wonders. Vlasto also made personal gifts both to the Numismatic and to the Archaeological Museum, and his name will always be associated with those institutions.

My purpose in writing these lines is not only to bid farewell to a dear and honoured friend, or to emphasize his merits. I also wish to urge others to follow his splendid example, to work for the love of antiquity, to help in preserving and recovering the works of the ancients, and to draw inspiration, for themselves and others, from that unique and unfailling source, the civilization of old Greece. These words are specially intended for those who are financially independent and free from anxiety for their daily bread. If they remain slaves to comfort, that happiness of the soul which alone makes life worth living will never be theirs.

Life finds its full value and acquires its full dignity only through the education of the mind. This alone can light our country on its new path; and without it every effort is vain.

G. P. OIKONOMOS.

BIBLIOGRAPHY.

Rare or Unpublished Coins of Taras, *Numismatic Chronicle*, 1907, pp. 227-90.

On a Recent Find of Coins struck during the Hannibalic Occupation of Tarentum, *ibid.*, 1909, pp. 253-63.

Coins of Metapontum and Tarentum, *ibid.*, 1920, pp. 277-78.

A Find of Tarentine Nomoi, &c., from Italy, *ibid.* 1922, pp. 245-47.

Alexander, Son of Neoptolemus, of Epirus, *ibid.*, 1926, pp. 154-31.

The late Mr. E. P. Warren's Hoard of Tarentine Horsemen and other Contributions to Tarentine Numismatics, *ibid.*, 1930, pp. 107-64.

TAPAΣ OIKIΣTHΣ (A Contribution to Tarentine Numismatics): New York 1922 (*A.N.S. Notes and Monographs*, No. 15).

Les Monnaies de bronze de Tarente, *Journ. Intern. d'Arch. Num.*, 1899, pp. 1-8.

Tarente, Additions et corrections, *ibid.*, 142-6, 403.

Les Monnaies d'or de Tarente, *ibid.*, 303-40.

Les Monnaies d'or de Tarente, *ibid.* 1901, 93-114.

THE SUPPOSED ORIENTAL INSCRIPTION ON A COIN OF CARRHAE, IN MESOPOTAMIA.

Sir George Hill, in his introduction to the *B.M.C. Arabia, &c.*, p. lxxxix (note 5), remarks "Grave doubt attaches to Sestini's description of a word in oriental script on a coin of Elagabalus [of Carrhae] (*Mus. Hederv.* iii, p. 128, 8; cf. Chwolson, *Die Ssabier*, p. 413)".

Recently an explanation of this coin, which has been mentioned also by Mionnet, Suppl. VIII, p. 396, no. 36, has occurred to me. His description of the piece is:

Rev. AY. K. ANT. Même tête [imberbe, radiée, d'Elagabale.]

KAP. KOΛ. M Croissant avec un astre : au bas, en lettres arabes liées, *pro Koph*, et *Rho*, (*id est*)
Ka Ru?

Æ 3, &c.

My suggestion is based on a specimen not of the exact issue described, but of another coin of Carrhae, given by Mionnet, v, p. 601, no. 44, as of an uncertain emperor:

Rev. AYΘ. III. A. (*sic*). Tête laurée et barbue, à g.

M. AY. A. KAP. (*sic*). Croissant; au-dessus, une étoile; dessous, ΔII((Δ (*sic*).

Æ 5, &c. (The *sic* is in each instance that of Mionnet, but I should have liked to insert it had he omitted it.)

A specimen of this coin has recently come into my possession, either from the same or very similar dies. It is in poor condition, and of poor style, and only slight traces of the obverse inscription can be seen, but the *bust* has rather the look of Septimius Severus than of any other bearded emperor. The reverse is in fair shape, and the barbarous inscription seems to be KAP ΛΙΑ ΑΥΡΗ and the line beneath the crescent is plainly Δ)) ((Δ. This perfectly symmetrical arrangement I am convinced is nothing more than a crude conventional representation of the base or altar, on which the image of the moon is often represented on coins of the town. May we not suppose that the "Arabian letters" on the coin attributed to Elagabalus are another instance of an attempt to represent the base by an unskilful workman?

(This coin has now been presented by the writer to the British Museum.—Edd.)

THOMAS OLLIVE MABBOTT.

XV.

BRITISH MUSEUM ACQUISITIONS 1935-1936.

[SEE PLATES XXXI-XXXII.]

SINCE the publication of the last article (*Num. Chron.*, 1936, p. 169) several interesting additions have been made to the Greek series in the British Museum. Among them may be mentioned the following:—

METAPONTUM.

1. *Obv.*—Head of Persephone r.

Rev.—Corn-ear; on l., META, below which, AY; on r. star.

Æ ↑ 21.0 mm., 116.8 gr. (7.57 grm.). Overstuck.

Presented by E. S. G. Robinson.

This is another example of *B.M.C.* no. 102, which must be dated round about 300 B.C., but its interest lies in the fact that it carries a graffito in Latin on the reverse between the star and the corn-ear. The letters are FIL, roughly scratched. The second letter, owing to a tag at the foot of the upright, might at first be taken for an E; but close examination reveals no adequate traces of the other cross-strokes and the tag must be due to a slip of the engraver's point as he passed to the next letter. The coin had seen perhaps a century of wear, certainly not more, before it was withdrawn, for whatever reason, from active circulation; and this withdrawal was presumably the occasion of the graffito. As the similar graffiti in Greek usually represent a proper name, the most likely completion of these three letters seems to be as Filippus, which is just the kind of

Latinized name that might be expected in the district and period. This is the only Latin graffito that I can trace on a Greek coin, and incidentally, for what it is worth, is an early Latin inscription.

AGRIGENTUM.

2. *Obv.*—Eagle l.; **AKPAC**
ΣΟΤΜΑ

Rev.—Crab, the markings on the shell developed into a human face; circular incuse.

R √ 27.5 mm., 269.4 gr. (17.6 grm.). Hess 15:ii:1934, lot 128. [Pl. XXXI.]

Presented by H. C. Hoskier.

A beautiful example in mint-state of this rare variety hitherto unrepresented in the Museum. The face on the crab's shell suggests a gorgon-head and has perhaps apotropaic significance. The coin may be dated about 450 B.C. or later, immediately before the beginning of the series with similar types but with symbols in the field of the reverse. Note the high weight: Sicilian coins of the time struck on the Attic standard are usually slightly heavier than the corresponding Athenian coins.

CAMARINA.

The Pozzi specimen of the well-known didrachm of Camarina with the head of the river god to l. and a nymph riding on a swan (Nauville, i, no. 403. = Hess 15:ii:1934, lot 138) has also been presented by Mr. Hoskier. This beautiful coin has unfortunately suffered under the restorer's hand. In its original state it appears to have been very close to, if not the same as, the unique(?) specimen figured in an "American Artist's" sale (Sotheby 5:vii:1910, lot 37) the obverse of which shows an ethnic but no fishes.

HYBLA MAGNA.

3. *Obv.*—Female bust r. with shoulders draped, wearing necklace and stephane, the hair rolled; dotted border.

Rev.—Demeter standing l. in long girdled chiton with overfold, the details of the head uncertain; she holds in r. three corn-ears, and leans l. on long bell-mouthed torch; on l. up, $\text{YBAA}\Sigma$; on r. down, $\text{MEΓAA}\Sigma$; linear border.

Æ ↑ 185 mm., 58.6 gr. (3.80 grm.). [Pl. XXXI.]

Of the three towns in Sicily called Hybla only one, Great Hybla not far from Catana, issued coins bearing the name. All belong to the second century B.C. and are extremely rare. The present variety is not mentioned by Head in the *Historia* or by Holm,¹ though it is figured by Torremuzza.² From his engraving of the reverse Demeter appears to be wearing veil and modius, and it may be so, though this particular detail is not clear on our coin. The bust of a goddess wearing veil and modius is the commonest of the obverse types. On the other coins, Holm, who has been generally followed, described it, on the strength of a passage in Pausanias (v. 23. 5), as that of Hybla, a native goddess connected with divination. But as Pausanias is expressly speaking of Hybla Gereatis and not of Great Hybla this identification is deprived of its force. We should rather see in it a head of Demeter, whether the Demeter on the reverse of our coin also wears a modius and veil or not. The obverse type is presumably the same as that on a coin with a different reverse

¹ *Geschichte Siziliens*, iii, p. 720.

² Castelli [Torremuzza], *Siciliae veteres nummi*, 1781, Tab. XXXVIII. 5.

published by Imhoof,³ though it lacks the letters Σα there placed behind the head. It has no very definite characteristic, but the stephane suggests Hera.

SYRACUSE.

4. *Obv.*—Quadriga r. at the walk; above, Nike flying r. to crown the horses.

Rev.—Head of Arethusa r. wearing necklace, the hair enveloped in sphendone and saccus decorated with zigzag border and meander pattern: in front, ΣΥΡΑΚΟΣΙΟΝ downwards; around, traces of four dolphins.

AR ⤵ 24.0 mm., 266.5 gr. (17.27 gm.). Hess 15:ii:1934, lot 173. Boehringer, *Münzen von Syrakus*. no. 645. [Pl. XXXI.]

5. *Obv.*—Similar.

Rev.—Head of Arethusa r. diademed, wearing ear-ring and necklace with jewel in form of lion's head; the hair is turned up over the diadem behind; around ΣΥΡΑΚΟΣΣΑ (*sic*) and four dolphins; circular incuse.

AR ⤵ 26.0 mm., 262.7 gr. (17.02 gm.). Hess 15:ii:1934, lot 165. Boehringer, *ibid.*, p. 255, no. B. 10. [Pl. XXXI.]

Both presented by H. C. Hoskier.

No. 4. which exhibits a die-combination hitherto unrepresented in the Museum, calls for no special comment. No. 5 is of great interest. It belongs to a little group of Sicilian imitations of Syracusan tetradrachms, linked together by die-couplings which have been collected and discussed by Boehringer (*ibid.*, pp. 71-72). The archaic appearance of the head is only superficial, as is indicated e.g. by the pendant in the shape of a lion's head, which is not found in the Syracusan series until

³ *Z. f. N.*, xviii (1886), p. 253, no. 2.

the second half of the fifth century. Boehringer, in suggesting Panormus as the mint, points out that the style closely resembles that of the native and Punic cities of the West, Segesta, Motya, &c. The strange inscription, which he takes to be a variant ethnic in the nominative singular, may perhaps be compared with the curious form $\Sigma\epsilon\gamma\epsilon\sigma\tau\alpha\zeta\iota\alpha$ which appears on some coins of Segesta.⁴ The letters were not cut by a Greek, and the fifth, especially, has a Punic look. Our coin, then, was most probably struck in Panormus, and may be dated to the third quarter of the fifth century. It must be among the earliest of the long line of Siculo-Punic issues, and one of the first coins made by a Semitic people in the West.

A gift of ten electrum coins with the types Apollo—tripod, and varying mint-marks on the obverse (*B.M.C.*, nos. 253 ff.), has been received from Mr. J. A. Spranger. The mint-marks and weights are: lyre, 3.65 and 3.62 grm.; lamp, 3.66 grm.; cornucopiae, 3.69 grm.; pot-helmet, 3.65 grm.; star, 3.72 grm.; smoking altar, 3.70 grm.; bucranium, 3.71 grm.; dolphin, 3.67 grm.; omphalos, 3.66 grm. The coins came from a hoard of unknown provenance which also contained similar pieces with the mint-marks amphora and cantharus. The accuracy of the weights is remarkable, the range being only a tenth of a gramme. This series was till recently given to the time of Dion, though the style has more analogy with coins of South Italy of the end of the fourth century, and the use of electrum and of varying symbols would have been more normal at a later date. Giesecke,⁵ on the other hand, has shown

⁴ E.g. *Sylloge Num. Graec.*, ii (Lloyd Coll.), no. 1199.

⁵ *Sicilia Numismatica*, p. 61.

grounds for an earlier attribution, to Dionysius I and II, and, in spite of the difficulties, his is perhaps the best solution.

CHALCIDIAN LEAGUE.

6. *Obv.*—Head of Apollo l., laureate.

Rev.—Seven-stringed lyre (cithara), with strap on r.; between uprights, tripod; above, on r. downwards, and l. upwards, ΧΑΛΚΙΔΕΩΝ.

AR ↑ 23.5 mm., 222.2 gr. (14.40 grm.). Hess 15:ii:1934, lot 225. [Pl. XXXI.]

Presented by H. C. Hoskier.

This beautiful head is clearly from the same hand as the lovely obverse of another tetradrachm in the British Museum (*B.M.C.*, no. 7), which also has the tripod symbol on the reverse. It was struck in Olynthus in the first quarter of the fourth century B.C.: closer dating must be postponed until after the appearance of the Corpus of coins of the Chalcidian League which is in preparation under the auspices of the American excavators of Olynthus.

MACEDONIA: ALEXANDER THE GREAT.

7. *Obv.*—Head of Heracles r. in lion-skin; dotted circle.

Rev.—Zeus seated l., with r. leg advanced, holding eagle and sceptre; in field l., Bucephalus' head l., wreath and Boeotian shield; beneath throne, BE and TI on r., ΑΛΕΞΑΝΔΡΟΥ; beneath, ΒΑΣΙΛΕΩΣ; dotted circle.

AR ↑ 24.5 mm., 260.8 gr. (16.90 grm.). [Pl. XXXI.]

A very fine example of one of a little group of coins struck at some mint in the Middle East. Other varieties in the Museum are a silver tetradrachm, without TI; and a gold stater, without the shield, reading EB instead BE. The detail of the present specimen is

so clear that the thongs supporting the leather seat of the chair can be discerned.

OLYMPE (Illyricum).

8. *Obv.*—Head of Zeus, laureate, r.; behind $\overline{\Lambda}$.

Rev.—Thunderbolt; above, $\text{O}\Lambda\Upsilon\text{M}\Pi\text{A}$; beneath ΣTAN ;
the whole in oak wreath.

Æ \downarrow 18.5 mm., 84.4 gr. (5.47 grm.). [Pl. XXXI.]

Presented by E. S. G. Robinson.

A similar coin was published without attribution by Signorina L. Cesano⁶ among the coins collected by the Italian Archaeological Mission in Albania. J. Millingen⁷ had already published a coin (from the collection of Mr. Hamilton) with the same legend but with different types, which he attributed to Olympe in Illyria. As no other specimen of this second coin (which in the meantime has disappeared) seems to have been published and it is not mentioned in the *Historia Numorum*, Millingen's description may be repeated here. "Laureated head of Apollo [to r.] behind ΓA . *Rev.* $\text{O}\Lambda\Upsilon\text{M}\Pi\text{A}\Sigma\text{TAN}$. A conical pillar. A laurel wreath encircling the whole." The letters behind the head must be the same as on the first coin, and I was at first inclined to read these too as ΓA , but while the right-hand side of the monogram is not quite distinct there are definite traces of it, and it appears quite clearly on the illustration of the Italian specimen cited above. Millingen (*l. c.*) has already drawn attention to the entry in Stephanus (*s.v.*): *'Ολύμπη πόλις 'Ιλλυρίας . . . τὸ ἐθνικὸν 'Ολυμπαῖος ἢ 'Ολυμπεύς*. The variant form of

⁶ *Atti e Mem. dell'Ist. Ital. di Num.*, vii (1932), p. 92, fig. 8.

⁷ *Ancient Coins*, London, 1831, p. 51, Pl. III. 19. I owe this reference to Prof. A. B. Cook's *Zeus*.

the ethnic here given is one specially common in Northern Greece. Nothing more appears to be known of the town. The types of both issues point unmistakably to the Adriatic district where they recur at other cities, e.g. at Pandosia and Phoenice, at Oricus and Apollonia, and if we may interpret the monogram on the obverse as the initial letters of *Ἀπειρωτᾶν*⁸ we obtain a little more light on its geographical and political situation. The date of both issues must be round about 200 B.C.

PHARAE.

9. *Obv.*—Boeotian shield.

Rev.—⊙ in the centre of square incuse, to which four cones project, one from the centre of each side.

Æ ↑ 1·0·0 mm., 189·2 gr. (12·26 grm.). Hess 15:ii:1934, lot 311.

Presented by H. C. Hoskier.

The developed pattern of the incuse shows this to be one of the latest issues of this mint, before the Persian War brought its activity to a stop in 480 B.C.

NICAËA.

10. *Obv.*—ΙΟΥΛΙΑ ΑΥΓΟΥΣΤΑ; bust of Julia Domna r., wearing robe with embroidered border.

Rev.—Four boys representing the Four Seasons; on the l. Spring, advancing r., steadies a basket held with both hands on his head; next, Summer advancing r., with head turned back, brandishes a sickle above his head with his r., and grasps a handful of corn-ears in his l.; next, Autumn advancing l., with head turned back, holds in r. a hare and in l. a dish of fruit; next, Winter advancing l., wearing sleeved tunic to knees

⁸ Cp. the same monogram in this sense on coins of the 3rd cent. *B.M.C. Thessaly, &c.*, p. 88.

with cape drawn up over head, breeches?, and boots, holds hare in r. and carries over l. shoulder a branch from which hangs a dead bird; all are naked except Winter; ΝΙΚΑΙΕΩΝ. Æ ↑ 28.0 mm.; 205.5 gr. (13.30 grm.). [Pl. XXXI.]

This coin is not described in the *Recueil général* and appears to be unpublished. The type of the Four Seasons is very rare in the Greek imperial series: the only other example which I can trace appears on a coin of Caracalla at Laodicea in Phrygia with the inscription *ΕΥΤΥΧΕΙΣ Καίροι*.⁹ It is, however, not uncommon during the second and third centuries in the Roman series especially among the medallions, the earliest example being found under Hadrian.¹⁰ From the beginning the details of the type are fixed and nothing quite like it occurs outside numismatic art. Elsewhere, e.g. in mosaic, the seasons are usually female (Horae), and where, as sometimes on sarcophagi, they are conceived as boys, the treatment is rather different.¹¹ Here they are represented not as chubby little boys, nor Cupids, but as muscular young figures at work. It may be suggested that the type is derived from an original and popular work of art, perhaps a painting, executed about the beginning of the second century A.D. The accompanying inscriptions on the medallions

⁹ Vaillant, *Num. Graec.*, p. 104. Though no example of this coin appears to have turned up since Vaillant's publication, there seems no reason to doubt its existence.

¹⁰ Gneecchi, *Medagl. Rom.*, iii, 146.

¹¹ Cf. the mosaic from Carthage, *B.M.C. Painting*, p. 89, no. 29; and the Campana plaques in the British Museum (D 583-4), and the Barberini sarcophagus, Strong, *Apotheosis and After Life*, Pl. 32. I owe these references to Mr. Roger Hinks with whom I have had the advantage of discussing the whole question.

are all of one tenor, *Saeculi* or *Temporum Felicitas*, *Felicia Tempora* (to which the Greek legend on the coin of Laodicea corresponds). They leave no doubt as to the meaning of the type—immediate prosperity, with the suggestion behind it of a new and happier period to be inaugurated for mankind. The notion of immortality, which emerges in the use of the similar type on sarcophagi and which might be applied to the imperial house, is not explicit.

The obverse, also, is remarkable for the embroidered border to the robe which the empress is wearing and which suggests the *toga praetexta*. Professor Alföldi, who first drew my attention to it, writes "the costume of Domna is a very important document for the *praetexta*-like state-dress of the empress: the juridical significance of such an assimilation of the empress to a magistrate is evident; not the wife of the Princeps but a true Dom(i)na figures here!" Domna never appears in such a dress on the imperial coins, and parallels are very scarce elsewhere—all from a comparatively restricted area. The only examples I can trace are at Byzantium, Calchedon, Creteia-Flaviopolis, Amorium, and Tavium.¹² It is another instance of the monarchical tendency which evolved a state-dress for ladies of the Imperial house owing nothing to feminine tradition, side by side with that of the emperor which in form at least was based on official republican usage.¹³ Domna was a princess in her own right with an

¹² *B.M.C.*, nos. 73, 31, 2, 44, 13, and 16, respectively. Her dress on the new picture in Berlin (Neugebauer in *Die Antike*, 1936, pp. 155 seqq.) seems rather different again.

¹³ A. Alföldi, 'Insignien u. Tracht der röm. Kaiser,' *Rom. Mitt.*, 1935, pp. 26 seqq.

imperial horoscope, for which Severus is said to have married her, and the innovation is in character.

CYZICUS.

The following little electrum pieces (nos. 11-17) have been presented by Mr. H. C. Hoskier. The reverses of all bear, of course, the characteristic square incuse.

11. *Obv.*—Centaur galloping l., brandishing branch; beneath, tunny.

El. 12.0 mm., 40.4 gr. (2.62 grm.). Sixth. Von Fritze, *Nomisma*, vi, p. 10, no. 124. [Pl. XXXII.]

12. *Obv.*—Sphinx l.; beneath, tunny; r. forepaw raised; "the lock of immortality" takes the shape of a palmette.

El. 11.5 mm., 42.0 gr. (2.72 grm.). Sixth. Von Fritze, *ibid.*, no. 127. [Pl. XXXII.]

13. *Obv.*—Nike, naked to the waist, kneeling l., holding apha-ton in raised r. hand, with upper border of garment wrapped round lowered l. forearm; beneath, tunny.

El. 11.5 mm., 40.6 gr. (2.63 grm.). Sixth. Von Fritze, *ibid.*, no. 154. [Pl. XXXII.]

14. *Obv.*—Perseus, naked, wearing winged and peaked cap, kneeling r., with head turned back; he holds the harpe in his r. hand, and Medusa's head in his l.; beneath, tunny.

El. 11.0 mm., 41.8 gr. (2.71 grm.). Sixth. Münzhandlung Basel VIII (1937), lot 333. Von Fritze, *ibid.*, no. 162. [Pl. XXXII.]

Perseus is wearing the cap of darkness, but it has not yet acquired a griffin's crest, though von Fritze so describes it.

15. *Obv.*—Crab; above, tunny's head r.

El. 9.0 mm., 20.0 gr. (1.30 grm.). Twelfth. Von Fritze, *ibid.*, no. 37. [Pl. XXXII.]

16. *Obv.*—Forepart of lioness l., gnawing bone; behind, tunny.

El. 9.0 mm., 20.6 gr. (1.33 grm.). Von Fritze, *ibid.*, no. 41. [Pl. XXXII.]

The type of the earliest drachms of Velia.

- 17 *Obv.*—Apollo, laureate, in long chiton seated r., holding lyre in l. hand and plectrum in r.; beneath, tunny.

El. 9.0 mm., 21.0 gr. (1.36 grm.). Twelfth. Münzhandlung Basel VIII (1937), lot 334. Cp. von Fritze, *ibid.*, no. 202. [Pl. XXXI.]

The denomination is new for this type.

18. *Obv.*—Head of Kore l., wearing single-pendant earring and necklace, sphendone and saccus, and wreathed with corn-ears; on r. downwards ΣΩΤΕΙΡΑ (only the bottoms of the last four letters visible).

Rev.—Lion's head l.; beneath, tunny l.; behind, crested Corinthian helmet l.; above on l. and r., KYIIK[HNΩ]N; trace of circular incuse.

Æ → 24.5 mm., 234.0 gr. (15.16 grm.). A. Hess (Lucerne) 15:ii:1934, lot. 394. [Pl. XXXI.]

Presented by H. C. Hoskier.

The tetradrachms of Cyzicus fall into two groups; an earlier of full Rhodian weight with lion's head reverse, and a later of reduced Rhodian weight with seated Apollo reverse. The latter bears a strong family likeness to the Seleucid Apollo-type and cannot be far removed from it in time; say 280 B.C. The earlier group is again divisible into two classes: a larger class usually with a small head in high relief and neat lettering on the obverse and with the ethnic abbreviated to *Kυζι* on the reverse; and a smaller class

showing a large head with individualized features and somewhat straggling letters on the obverse, and the ethnic *Κυζικηνων* on the reverse written at length. The first contains some twenty issues, each marked by a different symbol, as against only a third of that number in the second.

The earlier class with *Κυζι* must begin soon after 389 B.C., for the handling of the lion's head on one of its earliest members nearly resembles that on the unique alliance coin with the legend *Συν(μαχικον)* and Heracles strangling the snakes, which is closely dated round about that year.¹⁴ In view of the number of the issues the whole group can hardly cover a period of more than sixty years or so. The later class with *Κυζικηνων* seems therefore to be contemporary with Alexander, and there must be a considerable gap before coinage was renewed with the Apollo type early in the third century.

ILIUM.

19. To commemorate Sir George Hill's Directorship, Professor T. O. Mabbott has presented a unique tetradrachm of Ilium with the magistrate's name *ΜΕΛΑΝΤΟΥ* formerly in the Jameson Collection (*Cat.*, i, no. 1456, $\text{Æ} \uparrow$ 253.7 gr. (16.44 grm.) [Pl. XXXII]). It falls in the earliest of the three groups into which the issue has been divided¹⁵ and may be dated about 150 B.C. The rare name *Μελαντης* occurs at Athens (cp. Demosthenes, *de Corona*, 249).

¹⁴ *Num. Chron.*, 1928, pp. 10-11; compare with it *B.M.C.*, no. 126.

¹⁵ Regling in *Z.f.N.*, xxxviii (1928), p. 120: von Fritze, *Münzen von Ilium*, in Dörpfeld's, *Troja u. Ilion*, pp. 505-506.

MYTILENE.

20. *Obv.*--Head of Dionysus r., with long hair, wearing ivy wreath.

Rev.--Facing head of satyr with horse's ears; square linear frame.

El. \uparrow 10.5 mm., 39.4 gr. (2.55 grm.) Sixth. Hess Sale (Lucerne) 15 : ii : 1934, lot 417. [Pl. XXXII.]

Presented by H. C. Hoskier.

A new variant of the ordinary type (*B.M.C., Troas, &c.*, p. 164, no. 76). The satyr or Seilene is no longer a comic, bald figure but has flowing hair and a brutal dignity of his own.

PHOCAEA.

The three following coins also, like the electrum of Cyzicus and Mytilene, we owe to the kindness of Mr. H. C. Hoskier. All have the usual reverse consisting of a quadripartite incuse square.

21. *Obv.*--Three seals revolving round a central point; dotted circle.

El. 10.5 mm., 39.6 gr. (2.57 grm.) Sixth. Hess Sale (Lucerne), 15 : ii : 1934, lot 442. *Ars Classica* Sale XVI (1933), lot 1398, Winifred Lamb Collection; from the Erythrae? (1924) hoard. [Pl. XXXII.]

22. *Obv.*--Two seals swimming, set head to tail, their flippers fringed with dots; no trace of border.

El. 11.5 mm., 39.4 gr. (2.55 grm.) Sixth. From the Erythrae? (1924) hoard. [Pl. XXXII.]

For other examples of these rare and effective types, which are usually spoilt through faulty centring, see *Collection Jameson*, iii, nos. 2281-2282, which, with seven other hectae described there, also come from the same

hoard. It is to be regretted that there is no published record of it.

23. *Obv.*—Female head l. wearing single-pendant ear-ring, the hair bound with a triple cord and fastened off behind in a top-knot

El. 11.5 mm., 29.3 gr. (2.55 grm.). Hess Sale (Lucerne), 15:ii:1934, lot 445; Chios hoard (1931). [Pl. XXXII.]

A rare type of charming style, perhaps Artemis. Here again, there is no published record of the hoard.

MYLASA.

24. *Obv.*—Zeus, leaning on sceptre and holding patera in r., standing r. in galloping quadriga; on l. $\Gamma\epsilon\beta\alpha\kappa\tau\Omega$; in exergue, $M\upsilon\lambda\alpha\kappa\epsilon\omega\Omega\Nu$; dotted border.

Rev.— $\odot\Lambda\Lambda\varsigma$ | $\tau\odot\varsigma\Lambda$ | $\Nu\epsilon\theta\eta$ | $\kappa\epsilon\Nu$, in four lines within wreath.

$\mathcal{A}\epsilon$ \searrow 27.0 mm., 209.6 gr. (13.58 grm.). [Pl. XXXI.]

Presented by Prof. T. O. Mabbott.

Zeus in a Hellenic form, and not as Osogoa or Labraundos, is found but rarely at Mylasa (e.g. on a bronze of Caracalla *B.M.C.* no. 33) and never, as here, apparently naked in a chariot.

The occurrence of the reverse inscription elsewhere (*B.M.C.* no. 21) in conjunction with a portrait-head of Augustus indicates whom the obverse legend denotes. This may be construed with the verb of dedication on the reverse, and its setting suggests that we should identify Augustus with the god.

The name of the dedicant has always been given as $\Theta\lambda\alpha\sigma\tau\omicron\varsigma$, a form otherwise unknown, which, frankly, sounds impossible. It will be noted that the second and third letters run down to a common serif, while in

the ethnic Y is written like the Latin V, and it may be suggested that they really form a monogram, to be resolved as AVMA. The name then assumes a possible form, *Θαυμαστος*, which though not common, is already known elsewhere.¹⁶

LYCIA.

25. *Obv.*—Head of Athena r., wearing necklace, in Attic helmet, the falling crest divided into two separate tails.

Rev.—Bust of Athena helmeted, facing, with flowing hair, and drapery caught in at the neck by a circular brooch; the helmet is wreathed with olive and has three crests, the central one shown frontally, the other two in profile; beneath, disceles; dotted circle.

Æ ↑ 24.0 mm., 126.9 gr. (8.22 grm.). [Pl. XXXII.]

There is another specimen of this very rare coin in Paris. It is from the same dies, to judge by the wood-cut given by Babelon (*Traité*, ii, 2, cols. 297–298, no. 413b), though no sign of the doubtful traces of legend there shown on the obverse can be discerned on our coin, and it seems pretty certain that they can have no significance. In any case the obverse is not the side on which an inscription is to be expected on Lycian coins.

The reverse type, though fully frontal instead of three-quarter face, recalls the famous Syracusan tetradrachm by Eucleidas¹⁷, and the coin must have been struck round about 400.

SELGE.

26. *Obv.*—Two wrestlers; dotted border.

Rev.—Slinger r.; on r., hammer and astragalus; on l., [Σ]ΤΑΕΛΙΥΣ; square dotted frame; trace of square incuse.

Æ ↑ 23.5 mm., 160.6 gr. (10.41 grm.). [Pl. XXXII.]

¹⁶ Bechtel, *Griechische Personennamen*, p. 199.

¹⁷ B.M. *Guide, Coins of the Greeks*, II. C. 69.

The early issues of Selge, imitating the types of Aspendus, with the ethnic in the local alphabet, are extremely rare. The present coin (of which a second example is illustrated in the *Traité*, Pl. CLXIV. 18) belongs to the early part of the fourth century.

HOLMI.

27. *Obv.*—Athena standing l., resting l. on shield and holding Nike on outstretched r., who flies to crown her; behind her, upright spear; in field on r., dolphin; dotted circle.

Rev.—Apollo Sarpedonius laureate, naked to the waist, standing l., leaning with l. on branch of bay and holding patera in outstretched r.; on r. and l., OAMI TIKON; above on l., A; ground-line. On l., chisel-cut.

Æ ↑ 24.5 mm., 156.6 gr. (10.15 grm.).

[Pl. XXXII]

The situation of this little town of Cilicia¹⁸ is uncertain, but it was a seaport, as the dolphin shows, and not far distant from Seleucia, to which city its inhabitants were transferred early in the third century. Its coinage conforms closely to that of Side, whose types it borrows, and is very scarce. Up till now only two specimens of the stater are known, both in Berlin.¹⁹ The present coin seems to be from the same dies as the second of these, but is in far finer state, and enables us to complete the legend, and to see the dolphin in the field.

CYPRUS: Uncertain.

28. *Obv.*—Lion's head l. with gaping jaws.

Rev.—Cuttlefish; below on l., Λ (Vo or Ka); square incuse.

¹⁸ See Hill in *B.M.C., Lycaonia, &c.*, pp. l-li.

¹⁹ *Traité*, iii, pl. CXXXIX, nos. 14, 15.

Æ ← 20.5 mm., 153.0 gr. (9.91 grm.). [Pl. XXXII.
From the Larnaca hoard by exchange with the
Cyprus Museum.

This specimen is no. 552²⁰ of the Larnaca hoard published by P. Dikaïos (*Num. Chron.*, 1935, pp. 11, 15, and 26) who discusses the implications of this hitherto unknown type, which imitates the earliest coinage of Eretria.

ARMENIA.

29. *Obv.*—Bust of king r., diademed, wearing tiara and elaborate robe with tassels on shoulder; behind, Nike, holding wreath (and palm?), flying r. to crown him: the tiara is of unusual shape, with a peak, front and back, and an oval loop in the middle, its side being decorated with a globe flanked by two eagles; dotted circle.

Rev.—Female figure wearing turreted crown, kneeling r., offering wreath and palm to the king, who stands l. dressed in trousers, &c., and tiara, leaning his l. on sceptre and extending his r. to her; above, ΒΑΣΙΛΕΩΣ; on r. downwards [ΒΑ]ΣΙΛΕΩΝ; on l. downwards ΜΕΓΑΛΟΥ; beneath, upside down [ΑΡΤ]ΑΥΑΣ[ΔΟΥ].

Æ ↑ 19.0 mm., 79.3 gr. (5.14 grm.). [Pl. XXXII.]
From Mesopotamia.

Two other, but poorer, specimens of this interesting coin have already been published, by Hill (*Num. Chron.*, 1913, p. 273), and by Allotte de la Fuye (*Rev. Num.*, 1914, pp. 152 seqq.). A third was noted by Imhooft (*Zur gr. u. röm. Münzk.*, p. 233) in connexion with two coins of a second issue with a different reverse type. As he saw, both issues must belong to the same king and should be considered together. A third example of this second issue was described by Sestini from the

²⁰ The weight there given for the coin is too light.

Ainslie Collection,²¹ a fourth has lain in the Museum trays unidentified for over a hundred years, and a fifth has recently been presented. Their description follows:—

30. *Obv.*—The same portrait-head, but without globe on the tiara; behind, an eagle r., with wreath in beak, reaching up to crown it; dotted circle.

Rev.—Youthful female bust l., diademed, wearing lofty tiara with three peaks and cord falling from rear peak to shoulder; around, beginning on l. above, and divided by the bust, ΒΑΣΙΛΕΩΝΑΡ

ΤΟΥ
[TA]ΩΝΑ . . . ; dotted circle.

Æ ↑ 18.5 mm., 71.1 gr. (4.61 grm.).

[Pl. XXXII rev.]

R. Payne Knight Coll.

31. Similar *Rev.* ΒΑΣΙΛΕΩΝΑΡ
ΤΟΥ

Æ ↑ 4.30 mm., 66.3 gr. (4.30 grm.). [Pl. XXXII.]

Presented by R. C. Lockett.

The portraits on the obverses of these two issues are identical; both show the king wearing the same peculiar tiara with either Nike or an eagle crowning him from behind, a motif taken from the coinage of Phraates IV of Parthia but otherwise unknown for Armenia. As in the Parthian series the lettering is very much clumsier than the rest of the engraving, but Hill and Allotte have already determined the name on no. 29 with certainty as that of an Artavasdes. The same name must therefore lurk somewhere beneath the broken legends of the second issue. Imhoof transcribed his two inscriptions

²¹ *Descr. Num. Vet.*, p. 491, under Artavasdes. Where is it now? It can hardly be the B.M. coin described in the next paragraph, for the legend differs, though many of Ainslie's coins passed to Payne Knight.

as (1) ΒΑΣΙΛΕΩΣΝ (Σ or) ΠΙΟΥ
 ΤΑΟVIIIΑ and (2) ΒΑΣΙΛΕΩΣΝΙ

.. ΟΥ^{ΙΟΥ}ΠΙ; he took them to contain the name of the queen as well as the king. In effect a combination of the legends of the four coins suggests that we should read *Βασιλεως Αρταουασζιου* or—*σσιου* or *σστου*, the first syllable being on the left of the bust and the final syllable being on the upper line on the right. The complete inscription must remain uncertain, but there is room for little if any more—certainly not for the four words of no. 29 in full, though one B.M. coin appears to have *Βασιλεων*²² for *Βασιλεως*, and Sestini gives *Βασιλεως Βασιλεων Αρ.* Perhaps part of the title was abbreviated. It does not seem necessary to suppose that the female bust, whose identity is suggested below, was also named. Who was the Artavasdes? There are several possibilities.²³ (1) Artavasdes I, son of Tigranes the Great (56–34 B.C.), who in 36 joined Antony in his expedition against the Parthians, but deserted to the other side and was eventually dethroned in 34 by Antony, aided by Artavasdes of Media, who in his turn had deserted from Parthia to Rome. The portrait on the drachma attributed to Artavasdes I, probably correctly (*B.M.C., Galatia, &c.*, p. 101), bears no resemblance to that on our coins. (2) Artavasdes of Media, who as a reward for his desertion received part of Armenia in addition to his kingdom, which he held till ejected in 30 B.C. by Artaxes son of Artavasdes I. After Actium Augustus created him King of Armenia

²² Perhaps the Ν is really an Σ placed on its side.

²³ For details of what follows see *Cambridge Ancient History*, x, pp. 71 seqq., 254 seqq.

Minor. (3) Artavasdes II, grandson of Artavasdes I, whom the Romans about 1 B.C. tried without success to instal in place of his nephew Tigranes III. (4) Artavasdes III, grandson of Artavasdes of Media, who reigned from A.D. 4-6. The denarius with the heads of Augustus and Artavasdes (*B.M.C., ibid.*) probably belongs to (3) rather than (4), for the occasion is more suitable for the issue of so completely Roman a coin, and the portrait reveals, e.g. in the nose, a certain family likeness between uncle and nephew: it bears no resemblance to that on our coins.



Allotte has already drawn attention to the significant form of the tiara, with its peaked ends, which is quite different from the tiara set with five or six equal spikes worn by other Armenian kings and used by Antony to symbolize Armenia on his denarius celebrating the campaign of 34 B.C. (*B.M.C., Rom. Rep.*, Pl. CXV. 10). He suggests that it is a Median form and identifies the wearer as Artavasdes III (no. 4), son of Ariobarzanes, rejecting the attribution to his grandfather Artavasdes of Media chiefly because the portrait impresses him as being too young, indeed almost feminine. Our better-preserved coins show this impression to be illusory; they represent a virile type with hooked nose in early middle age. Further, while no trace of Roman influence is to be seen, such as might have been expected so late in Augustus's reign and is already noticeable in the denarius of Artavasdes II, Parthian influence is clear in the general lay-out and in the obverse adjuncts, Nike and eagle, first introduced by Pacorus and Phraates IV, the Parthian contemporaries of Artavasdes the Mede. The absence of the one influence, the presence of the other, and the title "king

of kings", all point rather to the uncertain ally of Antony than to the faithful client of Augustus. If the coins were struck by Artavasdes the Mede what is the significance of the types? The female figure of no. 29 kneeling before the king at once suggests the submission of that part of Armenia annexed by Artavasdes to his kingdom. The youthful queen is more difficult. It may be suggested that she is Iotape, his daughter, the child betrothed to Alexander Helios, son of Antony and Cleopatra, and thus destined by them to share the Eastern division of their empire. Her momentary importance was no less that her destiny was not fulfilled. It is much to be hoped that further discovery will establish for certain the reading of these very interesting coins.

PHILISTO-ARABIAN.


Six more coins of this series have been acquired, and five of them, like those mentioned in the last "acquisitions" article (*Num. Chron.*, 1936, p. 199), seem, on the available evidence, to have come from the Palestinian hoard described by Lambert (*Palestine Quarterly*, ii (1932), pp. 1 *seqq.*). Three of these were of the usual Athenian types; the first (wt. 12.3 gr. = 0.80 grm.) reading AΘE and practically indistinguishable except by its weight from an Athenian coin; the second (wt. 11.4 gr. = 0.74 grm.) without legend and with a corn-grain in its place; the third (wt. 4.3 gr. = 0.28 grm.) with a branch similarly placed. The fourth was an example of another small coin published by Lambert (*ibid.*, nos. 35-36). Two were of greater interest.

32. *Obv.*—Bearded head r., the hair bound with narrow cord; cable border.

Rev.—Grotesque bearded head facing, (Bes. ?); on r. and l.,  [= ]; dotted circle; circular incuse. Chisel-cut from crown to nose.


℞ ↑ 15.0 mm., 58.8 gr. (3.81 grm.). [Pl. XXXII.]

Presented by E. S. G. Robinson.

The only example of this coin previously known²⁴ is in poor condition and its inscription illegible. As the same legend, usually reversed, occurs on other pieces of this class with equine types (*Traité*, Pl. CXXIV. 14-16), all must come from the same mint, and, in view of the normal direction of the legend on the present coin, there seems no reason for Babelon's refusal²⁵ to regard this mint as the same which issued other coins with different types again and the legend , perhaps Gaza. The hoard cannot have been buried before the last quarter of the fourth century, as is shown by the presence of the Alexander coins in it; and since the condition of this and similar coins was still fairly fresh, their archaic appearance must be delusive and their date must be nearer the end than the beginning of the fifth century.

A further coin with Athenian types came from another source:

33. *Obv.*—Head of Athena r. as on late fifth-century coins of Athens.

Rev.—Owl r., the wing terminating in the head of a horned lion; below, on r., head and neck of bull?; in field l., ; square, cable-pattern frame; square incuse.

℞ √ 16.5 mm., 57.2 gr. (3.71 grm.). [Pl. XXXII.]

Presented by E. S. G. Robinson.

This drachm appears to be new. The cable-border of the reverse links it with a group of varying types

²⁴ *Traité*, ii. 2, cols. 658-659, Pl. CXXIV, no. 8.

²⁵ *Op. cit.*, ii. 2, col. 662, note 2.

(including the famous Jahve coin) which all show that feature (e.g. *Traité*, Pl. CXXIV, nos. 1, 2, and 4). In spite of its earlier appearance this coin, like no. 32 and those discussed with it, must have been struck within a few years, either way, of 400 B.C. The fantastic reverse is notable; the head of the lion-gryphon,²⁶ for as such the horns suggest that the beast should be completed, appears not merely to rest on the wing, but to be an integral part of it. The other animal is so stylized in pose as to be barely recognizable, but it has the horns and the blunt head of a bull, and the bull is the proper pendant of the lion in Oriental mythology. The sign in the field on the left is baffling. We should expect a letter of one of the allied Semitic scripts—Phoenician or Aramaic, but it does not correspond to any recognized form. On the other hand, it does closely resemble the Cypriote syllabic sign for *zo-*, and Cyprus is not far away.

ARABIA.

34. *Obv.*—Rudimentary head of Athena r., with two crescent-like markings on the cheek.

Rev.—Owl r.; on l., olive spray and crescent combined to form a pattern; on r. downwards, deformed ethnic AΘE.

AR ← 22.5 mm., 205.4 gr. (13.31 grm.).

[Pl. XXXII.]

Glendining 25:iii:1936, lot 179.

Presented by E. S. G. Robinson.


The Museum already possesses three of these extremely rare imitations in base silver of Athenian tetradrachms,

²⁶ It may not be more than a coincidence that the occasional appearances of the lion-gryphon on Alexander's gold coinage are confined to the district from which our coin comes, see Hill in *J.H.S.*, 1923, p. 156.

but all show a single crescent marking on the cheek. They were struck in the third century B.C. in North Arabia.

SELEUCIA ON THE TIGRIS.

The following coins have been presented with others from the Middle East by Professor E. Herzfeld. They came from the site of Seleucia and all appear to be part of a find.

35. *Obv.*—Turreted head of Tyche r.; behind, ?; dotted circle.

Rev.—Zeus seated l., leaning l. arm on sceptre and holding eagle in outstretched r. hand; on r. and l. downwards, and beneath, remains of ethnic ΣΕΛΕΥΚΕΩΝ | ΤΩΝΠΡΟΣΤΩΙ | ΤΙΓΡΕΙ; no trace of date.

Æ ↑ 21.5 mm., 56.3 gr. (3.65 grm.) [Pl. XXXII];
21.0 mm., 65.8 gr. (4.26 grm.); 25.0 mm.,
66.1 gr. (4.28 grm.).

36. *Obv.*—Similar, the hair in two plaits.

Rev.—Design less articulate; presence of date uncertain.



Æ ↑ 23.0 mm., 40.0 gr. (2.60 grm.); 21.5 mm.,
72.2 gr. (4.68 grm.).

37. *Obv.*—Similar: uncertain monogram.

Rev.—Beneath, date ΜΣ (72/1 B.C.).

Æ ↑ 20.5 mm., 85.0 gr. (5.51 grm.). [Pl. XXXII.]

38. *Obv.*—Similar: without monogram.

Rev.—Tyche seated l., holding cornucopiae in l. arm and Nike on r. hand outstretched; in field l., ; same inscription; beneath, date  Γ.

Æ ↑ 19.5 mm., 28.3 gr. (1.83 grm.).

Two more; monogram and date, &c., uncertain.

Æ ↑ 19.0 mm., 53.8 gr. (3.49 grm.); 21.0 mm.,
46.1 gr. (2.99 grm.).

39. *Obv.*—Similar: presence of monogram uncertain.

Rev.—Tyche standing l., holding cornucopiae in l. arm and Nike on r. hand outstretched; same inscription.

Æ ↑ 18.0 mm., 44.7 gr. (2.90 grm.).

In spite of their imperfect condition (the whole legend is not present on a single example) these coins are perhaps worth recording since they have every appearance of coming from a find, and two of the types, nos. 35–37 and 39, are new to the B.M. Catalogue (*Arabia*, &c., pp. cxiv–cxvii). Both of them, however, appear in considerable numbers and in equally imperfect state among the coins found in the recent excavations of the site and published by Mr. R. H. McDowell.²⁷ He assigns the coins with Zeus Nikephorus to about 138/7 B.C., but this type must have continued in use till a later date if the year on no. 37 is correctly read. The penultimate date-letter is doubtful, but the last one can hardly be other than Σ (200 of the Seleucid era) and therefore involves a year not earlier than 113/2 B.C.

ELYMAIS.

40. *Obv.*—Portrait head r., diademed; behind, Ξ ; bead and reel border.

Rev.—Apollo seated l. on omphalos, holding arrow in r. and resting l. on bow; on l., r., and in exergue, ΒΑΣΙΛΕΩΣ ΚΑΜΝΑΣΚΙΡΟΥ ΝΙΚΗΦΟΡΟΥ; dotted border.

Æ ↗ 27.5 mm., 255.5 gr. (16.56 grm.).

[Pl. XXXII.]

About this king himself, Kamnaskires I, nothing is

²⁷ University of Michigan Studies, Humanistic Series, vol. xxxvii, *Coins from Seleucia on the Tigris*, p. 96, no. 128; p. 99, no. 131; and p. 132.

known,²⁸ but his types are closely modelled on a Seleucid original of the earlier second century B.C. The coin does not appear to be from the same dies as either of the other two known specimens, in Paris and Berlin. The monogram on the obverse, though its lower details are not as distinct as could be desired, is most elaborate. It seems more than coincidence that the monogram on the obverse can be resolved into the letters *Ελυμαι*.

E. S. G. ROBINSON.

²⁸ *B.M.C., Arabia, &c.*, pp. clxxxiv-clxxxvii.

XVI.

A NEW TYPE OF SOUTH ARABIAN COINAGE.

[SEE PLATE XXXIII.]



THROUGH the generosity of Miss Freya Stark, the intrepid explorer and author of enthralling books on Eastern travel, the British Museum has recently acquired twelve bronze coins with Sabaean inscriptions of a type hitherto unrecorded. They were selected from coins which Miss Stark procured in the Hadramaut¹ during her visit there in 1936,² and which, according to information given her, were found on the way between Shihr and Tarim.



The coins were so crude-looking that at first—especially in their uncleaned state—they did not appear beyond suspicion. But a careful consideration of the details of provenance, fabric, types, and epigraphy is sufficient to substantiate their authenticity. Moreover, Dr. Plenderleith of the British Museum laboratory, who very kindly had the coins cleaned, declares that their chemical composition is similar to that of some undoubtedly ancient bronzes brought from the same region which he had examined a short time previously.

¹ The form Hadramaut is used here rather than the more accurate Ḥadramūt, which gives the transliteration and pronunciation of the modern Arabic name, simply because it has the sanction of long years of usage in English books of reference.

² A delightful account of her expedition, which was unfortunately interrupted by a dangerous illness, is given in her book, *The Southern Gates of Arabia*. See also *Hadramaut: Some of its Mysteries Unveiled*, by D. Van der Meulen and H. Von Wissmann, Leyden, 1932.

All the coins have been cast from a series of moulds, the junctions between each being still discernible where they had been amputated. The Museum specimens are all from different moulds. Both the obverse and reverse legends are reversed, which implies that the moulds were made direct and were not impressed from a positive.


1. *Obv.* Beardless male head to right wearing long ringlets ; in field, behind head,  (reversed) = \mathfrak{M} ; before face, downwards,  (reversed) = $\text{s}\bar{\text{I}}\text{N}$ (name of the Moon-God) ; all within double circle.

Rev. Eagle standing, to right, with open wings ; in field left, downwards  (reversed) = $\text{sh}\bar{\text{K}}\text{R}$; right downwards  (reversed) = YSHH ; (bottom part of eagle and portions of the legend obliterated).

\mathfrak{A} ; 1.85 ; wt. 1,126 gr. (73.0 grm.).

[Pl. XXXIII. 1.]

2. *Obv.* As no. 1, but the casting is more sharply defined and the join in the mould is discernible at the bottom. (The top of the coin has been broken off, obliterating the first letter of the name $\text{s}\bar{\text{I}}\text{N}$.)

Rev. As no. 1, but coin broken off at top and legend on left side obliterated. The bottom part of the eagle is intact and there is discernible below the talons a curved line .

\mathfrak{A} ; 1.9 ; wt. 832.8 gr. (53.97 grm.).

[Pl. XXXIII. 2.]

3. *Obv.* Completely obscured by a thick band of bronze which has become fused across the flan ; the double circle of the mould is all that is visible of the original design.

Rev. As no. 2, but legend as complete as on no. 1 though badly worn down ; traces of juncture of mould visible at top.

\mathfrak{A} ; 2.0 ; wt. 1,355 gr. (87.8 grm.).

4. *Obv.* As no. 1, but edge broken partly on right.

Rev. As no. 2, but edge broken at left, completely cutting out legend on that side.

Æ; 1.8; wt. 515.2 gr. (33.40 grm.).

[Pl. XXXIII. 3.]

5. *Obv.* As no. 1, but head larger; the legends on right almost obliterated; all within an oval; traces of juncture at top.

Rev. As no. 2, but legend almost completely effaced; outer circle. (Thin fabric.)

Æ; 2.0; wt. 324.1 gr. (21.0 grm.).

6. *Obv.* As no. 1; traces of face visible; s and r of legend on right, obliterated; mould-juncture discernible at top; holed and cut on right.

Rev. Obliterated; faint traces of eagle's right wing.

Æ; 1.8; wt. 251.5 gr. (16.3 grm.).

7. *Obv.* Small head right; in field behind, a large $\text{B} = \text{m}$ reversed; in front, downward, $\text{H} \text{H}$ (reversed) = $\text{s} \bar{\text{n}}$; traces of mould-juncture at bottom.

Rev. Crude outline of eagle right; in field behind, the letters B (reversed) = SHK are just discernible; in front, downwards, traces of H (reversed) = YSH only discernible.

Æ; 0.75; wt. 45.0 gr. (2.91 grm.).

[Pl. XXXIII. 5.]

8. *Obv.* As no. 7. [Pl. XXXIII. 4.]

Rev. Faint traces of small eagle; all traces of legends obliterated; traces of mould-juncture at top.

Æ; 0.8; wt 50.0 gr. (3.24 grm.).

9. *Obv.* As no. 7; traces of mould-juncture top and bottom. [Pl. XXXIII. 6.]

Rev. Faint remains of eagle; the only letter at all visible is the K (k) on left; traces of mould-juncture top and bottom.

Æ; 0.9; wt. 52.5 gr. (3.4 grm.).

10. *Obv.* Traces of head right; the only parts of the legend clearly visible are the *m* on left and the *i* on right; traces of mould-juncture at top.
Rev. Traces of eagle and Sabaean letters; traces of mould-juncture at top.
Æ; 0.75; wt. 38.5 gr. (2.49 grm.).
11. *Obv.* As above; only *m* and *sr* visible on left and right respectively; traces of outer circle; cut at bottom.
Rev. As above; traces of mould-juncture at bottom; cut at top.
Æ; 0.8; wt. 31.0 gr. (2.0 grm.). [Pl. XXXIII. 7.]
12. *Obv.* As no. 10; on left *m*, and right *sīn*, barely discernible on the margin.
Rev. As no. 10.
Æ; 0.65; wt. 26.8 gr. (1.74 grm.).

It is clear that these coins, in all denominations, bear the same types and legends on both obverse and reverse. Both the male head (on the obverse) and the eagle (on the reverse) are no doubt derived from Hellenistic or Roman prototypes. The former, the ringleted male head, is already known on the Himyarite coins of South Arabia of the class which Hill³ dates in the first century B.C. as well as on those which he⁴ assigns to A.D. 50-150. There is the same treatment of the hair falling in ringlets at the side (see p. 264, figs. 1-3).

The eagle type is until now unrecorded on South Arabian coins, although it is to be seen on certain coins of the Nabataeans.⁵ But the latter is a different variety of eagle. The particular eagle with open wings on the

³ *B.M.C. of the Greek Coins of Arabia, Mesopotamia, and Persia*, pp. 54 ff. and 64.

⁴ *Ibid.*, p. 68 f.

⁵ Hill, *ibid.*, Pl. I, nos. 5, 6.

present coins is also different from the Ptolemaic one, though the ponderous fabric of some of the coins themselves is very reminiscent of that of the large bronze coins of the Ptolemies and naturally suggests a parallel or relationship. My colleague Mr. Robinson, however,



FIG. 1.
(100-24 B.C.)

FIG. 2.
(First cent. B.C.)

FIG. 3.
(A.D. 50-150.)

considers that the closest numismatic resemblance to this variety of eagle type occurs on the Roman Imperial coins of Antioch⁶ or better still on certain of the Roman coins struck at Alexandria in the second century A.D.⁷

Although coin no. 1 [Pl. XXXIII. 1] is the only one on which the full legends of both obverse and reverse are intact there can be no doubt as to the accuracy of their transcription. The problem of interpretation, however, offers certain difficulties. There is no doubt about the meaning of the obverse legend to the right of the male head. It is 𐤋𐤍 , i.e. *Šn*, in which we can at once recognize the national deity of the ancient


⁶ *B.M.C. of the Greek Coins of Galatia, Cappadocia, and Syria*, p. 193, nos. 347, 352 (Septimius Severus). See below p. 273, figs. 6 and 7.

⁷ *B.M.C. of the Coins of Alexandria and the Nomes*, Pl. XXV, 662, see below p. 273, fig. 8; cf. Dattari, *Nomi Aug. Alex.*, nos. 1191 (Trajan) and 1570 (Hadrian).

tribes of the Hadramaut in Pre-Islamic days. Just as we find on the Katabanian inscriptions the god *'Amm*, on the Sabaean the god *Ilmakah*, and on the Minaean the god *Wadd* occupying the rôle of local folk-deity, so do we find the relatively few Hadramautic inscriptions particularizing the god *Sin*.⁸

Sin was the god of the moon. Unlike the mythological concepts of the classical civilizations in which a sun-god and a moon-goddess were worshipped, the South Semitic races—like the Germanic—considered the moon as a male and the sun as a female deity.⁹

The important rôle played by *Sin* the moon-god as "Father of the gods" in Arabia in ancient times was no doubt largely due to the fact that to the nomadic Bedouin, who avoided travelling in the heat of the mid-day sun, the moon by night was their most reliable guide. Hence he, naturally, assumed in their eyes the place of chief deity. However that may be, we find the cult of the moon-god flourishing from very early times amongst the Semitic peoples.¹⁰ The Biblical Ur of the

⁸ D. Nielsen, *Handbuch der altarabischen Altertumskunde*, Copenhagen, 1927, i, p. 193. For inscriptional occurrences see *Répertoire d'épigraphie sémitique*, v, nos. 2693, 2704, 3952, 4180, 4182, 4207, and G. Ryckmans, *Inscr. sud-Arabes in Muséon*, 1937, pp. 245-9. On a stone fragment from Aden (published in the *Corpus Inscripti-onum Semiticarum*, iv, 2, no. 594 bis) the god's name apparently occurs in a defective form as  S(I)N. See also Littmann's inscription below, p. 277.

⁹ In modern Arabic the moon (قمر) is still a masculine and the sun (شمس) a feminine substantive, just as *Mond* and *Sonne* in German.

¹⁰ See article *SIN* in Roscher's *Lexicon*, pp. 883-921. We are mostly familiar with his name in connexion with the Wandering of the Israelites in the "Wilderness of Sin" (Exodus, chap. 16,

Chaldees was a celebrated centre of his devotees. "The powerful dynasties which ruled Shumer and Akkad from there in the fourth millennium had doubtless introduced the worship of their special god in every city they ruled, and by the time that the kings of the Third Dynasty of Ur, about 2300-2190, were controlling the river valleys from the city of Ashur in the north to the Persian Gulf, from Ur to Susa, *Sin* was an accepted member of the pantheon, worshipped at Babylon as elsewhere."¹¹

From the Tigro-Euphrates Valley the worship of the moon-god no doubt passed into the great Arabian Peninsula. As already mentioned above, his name *Sin* occurs on several inscriptions from the Hadramaut. But this is the first recorded instance of his name appearing on coins, although his crescent-symbol is found frequently on Himyarite and other South Arabian epigraphic and numismatic remains.¹² In view of this fact it is all the more remarkable that his crescent should be absent from the present coins though his name is written in full, unless, of course, we regard the curved line below the eagle on the reverse as being intended for that. But, as will appear below, this is doubtful.

Are we to regard the male head on the obverse as a representation of the god himself? The fact that the god's name accompanies it makes it more than probable. But it is also conceivable that the head here portrayed is meant for some king of the Hadramaut,

&c.) and the Peninsula of Sinai which still to-day perpetuates his name.

¹¹ Sidney Smith, *Babylonian Historical Texts*, pp. 53-54.

¹² See above p. 264, figs. 1 and 2, and below p. 271, fig. 4.

whose authority emanated from *Sīn*, "the King of Gods", and whose name, perhaps, incorporated that of the god in some compound form such as is common in Semitic nomenclature.

The large letter **𐩦** (M) in isolation on the left of the head is capable of several suggested explanations. It is too prominently delineated in every instance, even on the small coins, to be merely tagged on to the name *Sīn* as an example of the *mīmation* characteristic of this South Semitic language group (thus *SĪN^m*). We must, therefore, regard it as an abbreviation for some uncertain word. Several conjectures suggest themselves:

(a) As the initial letter of **𐩦𐩣** = MLK (*malak*), i.e. king.

(b) As denoting **𐩦𐩣𐩪** = MKRB (*Mukarrib*) the general title of the priest-king of the South Arabian monarchy. (Both of these conjectures are, however, improbable.)

(c) As standing for **𐩦𐩣** = MR' (*mar'a*), i.e. man or lord. In this case the full obverse legend should be read as M(R')SĪN, i.e. "the man or lord of (the god) *Sīn*". Mar'a-Sin might even possibly be the proper name of the Hadramaut king in whose reign the coins were struck. A parallel to the phrase may be seen in a Minaean inscription published by Jaussen and Savignac¹³ where the proper name **𐩦𐩣𐩪𐩣** MRATWD (i.e. *Mar'atwadd*) occurs, the significance of which seems to be "the lady of (the god) Wadd". Mordtmann¹⁴ interprets the name as "Princess of Wadd" (*Fürstin*

¹³ *Mission archéologique en Arabie*, Paris, 1914, ii, p. 290.

¹⁴ *Beiträge zur Minäischen Epigraphik*, p. 24.

des Wadd). *Mar'at* is the feminine of *Mar'a*, and as we have already mentioned above, the god *Wadd* was specially revered by the Minaeans in just the same way as *Sin* was by the people of the Hadramaut, so that the parallelism is complete. Again on a Himyarite inscription published in the *Corpus Inscriptionum Semiticarum* (IV, i, p. 295 f.) we find the name MAR'ASHAMAS (𐩦𐩣𐩦𐩣), literally "man of the sun", i.e. servant or worshipper of (the sun-goddess) *Shamas*, which is presumably used as a proper name.¹⁵ And there are many cognate examples.

(d) Perhaps the *m* is the initial letter of a place-name. Professor G. Ryckmans of Louvain, the eminent authority on South Arabian inscriptions, writes to me suggesting that it may refer to some sanctuary of the god *Sin*, e.g. 𐩦𐩣𐩦𐩣 MSHWR, i.e. *Mashwar*¹⁶; or that it may conceal the name of a mint-town. Longpérier, followed by Schlumberger,¹⁷ had in the same way suggested that the well-known letter *n* (𐩦) on the cheek of Athena in the early Sabaeen coins was intended for the mint-signature of the town of Nejrān (𐩦𐩣𐩦𐩣 = NJRN). Unfortunately for Schlumberger's view, however, other isolated enigmatic letters occur on four different denominations, which would on the same analogy indicate, as Hill points out,¹⁸ that "four different denominations were issued from four different mints". This objection cannot, however, hold good in the case of these new Hadramaut coins, since the initial

¹⁵ See K. Conti Rossini, *Chrestomathia Arabica Meridionalis Epigraphica*, Rome, 1931, pp. 180-181.

¹⁶ Cf. his *Les Noms propres sud-sémitiques*, i, p. 414 b.

¹⁷ *Le Trésor de San'ā*, Paris, 1880, pp. 2, 20 ff.

¹⁸ *B.M.C. Arabia*, p. xlvii.

letter is the same on all denominations, and therefore, whatever it represents, it cannot be a denominational abbreviation, whereas it may possibly be a mint-signature.

If, for supposition's sake, we take the letter to be a mint-initial, then M. Ryckmans suggests to me the town of *Maifa'at* (𐩇𐩣𐩪𐩠𐩢𐩪 = MIF'T) which is known from several inscriptions.¹⁹

Whatever the significance of the letter may be it is interesting to note that it also appears in just such a position behind the ringleted head on the obverse of a small silver coin illustrated by Müller.²⁰ Whichever of the above conjectures, if indeed any of them, is the true one may never be ascertained, and we must be content to leave it thus.

If the obverse is difficult, the reverse is even more so. The values, however, of the Sabaeen characters are beyond dispute: SHKR/YSHH. The former word (*Shkr*) means "top or roof of a building",²¹ and is also known in Katabanian inscriptions as the sanctuary of the local god 'Amm.²² As part of a Sabaeen proper name it is also preserved in the translation of a tomb-inscription

¹⁹ Cf. Ryckmans, *op. cit.*, p. 343. Two places of this name, situated two days' journey apart, are known, according to the *Répertoire*, v, no. 2687, l. 4. *Maifa Metropolis* is mentioned by Ptolemy (*Geographia*, VI, vii, 41). See *C.I.S.*, IV, ii, pp. 360-361.

²⁰ *Südarabische Alterthümer im Kunsthistorischen Hofmuseum*, Vienna, 1899, p. 69, Pl. XIV, no. 21. The coin in question, it must be remembered, shows the head facing left, since it is die-struck and not cast like the ones which we are now considering.

²¹ Conti Rossini, *op. cit.*, p. 252 (*summitas aedificii, tectum*).

²² Cf. Ryckmans, *ibid.*, i, p. 375; Grohmann, *Göttersymbole*, p. 66b. "By command of 'Amm of *Shkr* ('Amm *dhū-Shkr*)." Ryckmans vocalizes the name as *Shkr*.

Prof. Ryckmans, to whom I submitted my transliteration of the legend, confesses that he is unable to solve the enigma, but that his own view is that SHKR is the name of some place in the Hadramaut, perhaps the residence of the sovereign (*malak* or *mukarrib*) whose initials may be comprised in the rest of the legend YSHH. He draws my attention to examples of triple names²⁵ amongst the South Arabian kings, e.g.:

(Katabanian) 30449|114|43 (Shahar Hilal
Yuhan'im).

The significance of the eagle-type must now be considered. Important clues are furnished by two remarkable South Arabian gems, one (*a*) in the British

²⁴ Ryckmans, *ibid.*, p. 32.

²⁵ Cf. also Hill, *ibid.*, pp. lxxiii, lxxix; Jaussen in *Revue Biblique*, 1926, p. 549; and D. S. Margoliouth in *Proceedings of the British Academy*, vol. xi, p. 182.

Museum (fig. 4) and the other (b) in Berlin (fig. 5). On account of their bearing on the subject they deserve some brief description:

(a) This remarkable gem was first published by



FIG. 4.



FIG. 5.

Birch and Franks²⁶ in 1863. It is described thus: "Very convex oval intaglio, engraved on a sardonyx with white layers, $\frac{7}{10}$ in. high; in the centre an eagle, holding apparently, a branch; about it are the Himyaritic letters נאדִים Nadim; below is an inscription in Cufic characters, of which only the latter part can be deciphered, viz.: 'في عذاب النار' in the punishment (or torture) of the fire'. This gem was probably found in Babylonia, and was acquired by the Museum in 1854 with a collection formed by Captain Jones, H.E.I.C." The chief exception that must be taken to the above

²⁶ *Inscriptions in the Himyarite character now deposited in the British Museum chiefly discovered in South Arabia*, Pl. XVIII, no. 42. The above drawing is reproduced from this source, as the actual gem was not available at the time for purposes of examination and photography. Its value as an archaeological relic can be deduced from the number of times it has since been reproduced and commented on. The following instances are known to me: E. Osiander in his article "Zur himyarischen Alterthumskunke" in *Z.D.M.G.*, xix (1865), Pl. 35, no. e, p. 293; D. Nielsen, *Die altarabische Mondreligion* (Strassburg, 1904), p. 157, fig. 25; A. Grohmann in his valuable article "Göttersymbole und Symboltiere auf süd-arabischen Denkmälern" (Vienna, 1914) and in his chapter "Zur Archäologie Südarabiens" in Nielsen's *Handbuch*, i, p. 175, fig. 75; and recently in the *Corpus*, IV, iii, no. 736.

description is that the characters, other than Himyarite, are *Pehlevi*, and not *Arabic* in Kufic script. With this conclusion (also that of the editors of the *C.I.S.*) Prof. Herzfeld, to whom I showed the drawing, agrees, although it would require a minute examination of the original before one could try to determine any possible meaning. The Himyarite legend has been read as **𐩦𐩣𐩬𐩨** (*Na'd^m*)²⁷, a very rare proper name apparently, which can throw no light on what concerns us here, namely the eagle. What does, however, throw considerable light is the presence above of the crescent-symbol, the significance of which will be considered later.

(b) The Berlin gem is an onyx with an eagle surrounded by a Sabaeen legend in two lines reading (left to right) across **𐩦𐩣𐩬𐩨** = *LH'IM* (i.e. *lahiy'amm*). The meaning is "May (the god) 'Amm make happy". It was first published by J. H. Mordtmann.²⁸

Although the eagle-type on these gems is in each case more akin in style to the one on the coins of Antioch (see figs. 6 and 7) in that its head is turned backwards, nevertheless its association with a crescent-symbol on the one hand, and with mention of the moon-god 'Amm on the other, indicates that it represents a lunar and not a solar deity, as is usually the case with the Syrian eagle. In fact, we can safely suppose that the eagle on our new coins, as well as

²⁷ So Birch and Franks, the *C.I.S.*, and Ryckmans (*ibid.*, p. 134), although Halévy in *Journal Asiatique*, V^{me} Série, tome iv (1874), p. 352, ventured to read *Dana^m*.

²⁸ In *Z.D.M.G.*, xxxix (1885), p. 236; and again in his *Himyarische Inschriften und Altertümer in den königlichen Museen zu Berlin*, 1893, p. 52. Recently and more accurately it has been published in the *C.I.S.*, *ibid.*, no. 807.

on the above gems, is the eagle-god whose worship is recorded amongst the pagan Arabs before the days of Islam. In this connexion we have an illuminating passage in the Koran (Sura 71, verses 22-23), in which



FIG. 6.
Antioch
A.D. 202.

FIG. 7.
Antioch
A.D. 202.

FIG. 8.
Alexandria
A.D. 128.

certain of these deities of the *Jāhilīya*, or Pre-Islamic period, are enumerated, although they are linked with the impious people of the days of Noah (*Nūḥ*).

According to the tradition enshrined in the Koran, these infidels plotted "and said: Forsake not your gods; forsake not Wadd nor Suwā', nor Yaghūth and Ya'ūḡ and Nasr" (وَلَا تَذَرْنِ وَدًّا وَلَا سُوَاعًا وَلَا يَغُوثَ وَيَعُوقَ وَنَسْرًا). *Wadd* we already know as the folk-god of the Minaeans. According to Arabic tradition *Surwā'* was the tribal deity of Hudhail, while Yaghūth and Ya'ūḡ were revered respectively by the tribes of Madhhij and Hamdān. But *Nasr* is the one that particularly concerns us. Most Arabic works of reference give little more concerning *Nasr* than what we already know from the Koranic passage above quoted, namely "one of the five idols which the Arabs worshipped".²⁹ He was the special deity, however, of the Himyarite clan of *Dhu'l-Kalā'*.²⁰ In Arabic the word *nasr* (نَسْرٌ) means some-

²⁹ Yāḡūt, *Geogr. Wörterbuch*, ed. F. Wüstenfeld, iv, pp. 780-781.

³⁰ Or *Dhu'l-Kilā'*. De Sacy's *Chrestomathie arabe*, iii, p. 105;

times "vulture", but it is usually the name applicable to the eagle³¹, and as we know from other sources³² that the Arabs worshipped the eagle, it is permissible to conclude that *Nasr* was an eagle-god associated with the moon-cult, as can be argued from the evidence of the above gems and the presence of an eagle on the present coins bearing the name of the great moon-god *Sin*.

The worship of *Nasr* is said to have been introduced into the Yemen by 'Amr ibn Luḥai (a legendary chieftain of the Banī *Khuzā'a*, who according to Arabic legend corrupted the true religion of Abraham into a form of gross idolatry). From him the cult passed over to the Himyarite tribes of the South of Arabia, where it lasted until the time of *Dhū Nuwās*, the last representative of the Himyarite monarchs, who about a century before Muḥammad earned notoriety by massacring the Christians of Nejrān.³³

The presence, therefore, in South Arabia of an eagle-cult with lunar associations is amply vouched for, and the present coins provide us with fresh confirmation.

and Osiander in *Z.M.D.G.*, vii, p. 473. In only one instance—and that perhaps accidentally—is *Nasr* construed as feminine (F. A. Arnold, *Chrestomathia Arabica*, i, p. 189, *وَأَمَّا نَسْرُ فَكَانَتْ لِحَمِيرَ لَّال* (ذي الكلاع) in a commentary by a writer who died in A.H. 510 (A.D. 1116) and is scarcely likely to have known any better.

³¹ See Lane's *Arabic Lexicon*, p. 2789.

³² In the *Doctrine of the Apostle Addai*, for instance, we read that the inhabitants of the town of Edessa in Syria were accused of worshipping the eagle as did the Arabs. See *Doctrina Addaei*, ed. Phillips, p. 24, quoted by W. Robertson Smith in his *Kinship and Marriage in Early Arabia*, p. 209, and by J. Wellhausen, *Reste arabischen Heidenthums*, p. 23.

³³ See Yāḩūt, *op. cit.*; Ibn al-Kalbī, *Kitāb al-Aṣnām*, edited by Ahmed Zeki Pacha, 1924; and *Revue Biblique*, 1926, p. 410.

It is surprising, in view of the importance of the cult amongst the Pre-Islamic Arabs, that the eagle does not figure prominently amongst the animals sculptured on Sabaeen monuments so far discovered. But it has to be borne in mind that Arabia is still *terra incognita* to the archaeologist, although it is gratifying to learn that Miss Stark, the donor of these coins, is now conducting archaeological excavations in the Hadramaut. In all probability further evidence of the cult of the moon-god will be forthcoming as a result.

A curious point noticed by Jaussen and Savignac (*Mission, ibid.*, p. 400) is that the eagle is much commoner on the monuments of Medain Saleh in North Arabia than on those of Petra, the Nabataean metropolis, where one would expect to find it, if Dussaud's theory³⁴ be correct that the worship of *Nasr*, the eagle-god, amongst the Arabs was an echo of the Syrian cult of the sun-god. Although Jaussen and Savignac dispute Dussaud's view, they nevertheless regard the Arab god *Nasr* as a solar deity. In the west the eagle was certainly the bird of Zeus, and in certain parts of the Hellenistic world the worship of the latter, together with his symbol, was assimilated to that of the local sun-god. Such syncretism may hold good for Syria, and perhaps North Arabia, but it may not hold in the case of South Arabian remains. We have seen on the gems, above mentioned, and on these newly discovered coins, the association of the eagle in each case with the moon-god cult. Moreover, we find the name *Nasr* in every case (with the one late and probably accidental exception noted above p. 274) construed as a mascu-

³⁴ *Notes de mythologie syrienne*, Paris 1903, pp. 22-23.

line.³⁵ In contrast to this we have several Sabaeen inscriptions in which the sun-deity *Shamas* is mentioned, and always as a goddess or *Ba'alat*³⁶. Thus we may safely draw the conclusion that the divinity *Nasr* of the Arabian inscriptions and of the Koran was in fact an eagle- or vulture-deity, as the name indeed implies, and a tribal moon-god, not a solar goddess.³⁷

What conclusion can be drawn from the presence of the crescent and disk (☾) above the eagle on the British Museum gem? The significance of the symbol has been variously interpreted: (a) as crescent and star (Venus); (b) as crescent and sun-disk; (c) as crescent and full-moon.

An examination of the occurrence of the symbol on South Arabian monuments reveals it in the following contexts:

(a) On an altar dedicated "To *Shārik*". *Shārik* may be an epithet "eastern" applied to some deity, perhaps '*Athtar* (*C.I.S.*, *ibid.*, no. 453). Mordtmann (*Z.D.M.G.*, xxxix, p. 235) has pointed out that the word (الشارق) is known to the lexicographers as a Pre-Islamic idol. Moreover it cannot refer to a solar deity, since "sun" in Himyarite is feminine.

³⁵ The name also occurs as the proper name of a man, *Corpus*, iv, no. 434, line 7. For Sabaeen inscriptions with dedications to *Nasr* see *Corpus*, *ibid.*, nos. 189, 552-555, and *R.E.S.* no. 4084; for its occurrence on a Lihyanite inscription found at El-'Ola (Al-'Ulā) in North Arabia, see D. H. Müller, *Epigraphische Denkmäler aus Arabien*, p. 71, Pl. IV.

³⁶ See *Corpus*, *ibid.*, pp. 359 ff.

³⁷ Osiander (*Z.D.M.G.*, vii, p. 475) considered the eagle as a solar goddess; Nielsen, however (*Altarabische Mondreligion*, p. 157), agrees in regarding it as a symbol of the lunar national god, although he looks upon the disk of the symbol ☾ as being a star, presumably Venus (*ibid.*, p. 110), above a crescent moon.

(b) On inscriptions containing the name of *Shamas* (Sun) in compound form, e.g. *C.I.S.*, nos. 226, 285 (where there are distinct traces of rays falling from the disk), 362, 828. Another instance is perhaps on the inscription published by Mordtmann and Mittwoch in *Rathjens-von Wissmannsche Südarabien-Reise*, i, pp. 139-140, and ii, p. 111, fig. 73, but the legend is far from certain.

(c) On an altar with mention of the moon-god *Wadd*, as well as of '*Athtar*, *Sm*', and *Dhāt Hmī*, the latter a sun-goddess (Glaser, 737; Grohmann, *Göttersymbole*, p. 43).

(d) On an altar consecrated to *Wadd* the moon-god (*C.I.S.*, 469).

(e) On a Katabanian altar with mention of the moon-god '*Amm*' (Grohmann, *ibid.*, p. 40).

(f) On an altar-fragment found in Abyssinia, but which no doubt emanated from the Hadramaut, since it is dedicated to the moon-god *Sīn* (whose name incidentally is written *sn*) (E. Littmann, *Deutsche Aksum-expedition*, iv, no. 32, p. 60; Grohmann, *ibid.*, p. 41, fig. 96).

(g) On an inscription (*C.I.S.*, 251) in which there is no mention of either sun or moon or star. See also Mordtmann and Mittwoch, *op. cit.*, i, pp. 139, 234-239; ii, pp. 111-114; and Ryckmans in *Muséon*, 1937, p. 260.

(h) On the British Museum gem (no. 42) with eagle; on Himyarite coins (see above, figs. 1 and 2) in conjunction with a male head which most probably is that of a deity; and on a Sabaean gem in Berlin along with four animals' heads, horse, goat, sheep, and lion (Grohmann. *ibid.*, p. 40).³⁸

³⁸ There is apparently an eagle, facing right, with open wings

Grohmann, who has discussed the problem (*ibid.*, pp. 37-44), comes to the conclusion that possibly at a late period the symbol had reference to sun-worship. But it is also conceivable, he is compelled to add, that it indicated the moon-godhead, either in conjunction with his daughter, or spouse—the sun-(goddess),—or else with 'Athtar (Ishtar, Astarte), in which case the disk above symbolized the star. The present writer is of the opinion that the evidence summarized above indicates a preponderance in favour of its being a lunar symbol, with occasional astral or solar applications.³⁹ Examples (*d*), (*e*), and (*f*) are especially strong in favour of this view. If we add to this the new evidence of the present coins and the above-mentioned gems (*h*), it is tantamount to certainty. *The coins* have the moon-god *Sîn*—plus the eagle-god; *the B.M. Gem* has the eagle standing on a lunar crescent with crescent and disk above; while *the Berlin gem*⁴⁰ has the eagle together with a reference to the Katabanian moon-god 'Amm. *In each of these cases there is a lunar relationship.*

Before we conclude our interpretation of the reverse type there is one minor point that deserves a passing notice. Below the eagle an undulating line will be observed (—). The question arises: Has this any special significance? Or is it simply a base line?

but without inscription on a Himyarite stone in the possession of Kaiky Muncherjee of Aden. See Jaussen's article in the *Revue Biblique*, 1926, Pl. X, no. 3, and XIII, no. 3.

³⁹ It should perhaps be borne in mind in this connexion that in Sabaeen the word *Shamas* (sun) has become according to Prof. Ryckmans (i, p. 33) *un terme générique désignant les divinités familiales.*

⁴⁰ Not mentioned by Grohmann.

The presence of a curved line, presumably a lunar crescent below the eagle on the B.M. gem mentioned above, suggests that perhaps the present line may have a similar significance. There is, however, just another possibility which suggests itself, namely, that it may represent the well-known curved sign $\}}$ on the already published Himyarite coins.⁴¹ It is frequently associated on the Sabaean monuments with the moon-god *Ilmakah*, so that it would not be out of place in conjunction with other lunar symbolism here.⁴²

The question of an approximate date for these coins may now be ventured. A comparison with the types on Himyarite coins together with the parallels already noted on Roman Imperial coins of Antioch and Alexandria would indicate at the earliest the second century A.D. The epigraphy of the coins rather favours this view. The forms of the letters point to a late date.

Hill⁴³ summed up the extant coinage of Southern Arabia Felix as follows:

(1) The coinage of the *Sabaean* dynasty, diverging into (a) the *Himyarite* and (b) the *Katabanian*.

(2) A small separate group, which may be *Minæan*.

The discovery of the above coins enables us to add a new species which we may conveniently term the *Hadramautic*.

JOHN WALKER.

⁴¹ Hill, *ibid.*, p. lvii f.

⁴² For a discussion of this symbol of godhead, or rod of sovereignty and its Babylonian counterpart consult Grohmann, *Göttersymbole*, pp. 6-15.

⁴³ *Ibid.*, p. lxxxiv.

XVII.

QUELQUES MONNAIES ARABES À LÉGENDES PEHLEVIES ET QUELQUES AUTRES MON- NAIES BILINGUES PEHLEVIE-ARABES.

[VOIR PLATE XXXIV.]

DANS le XX^{ème} volume des *Mémoires de la Mission Archéologique de Perse*, le Colonel Allotte de la Fuÿe a publié cinq monnaies de bronze post-sassanides à légendes pehlevies, dont deux portent au droit une légende arabe. Au cours de cinq dernières saisons de fouilles à Suse, nous avons recueilli vingt autres monnaies analogues, également de bronze, d'ailleurs très frustes, dont deux sont publiées par nous dans le XXV^{ème} volume des *Mémoires*, p. 126, nos. 231 et 232 (v. plus bas nos. 23 et 24). Le Cabinet des Médailles de la Bibliothèque Nationale de Paris possède une autre monnaie de bronze, provenant également de Suse.

Dans le *Catalogue of Oriental Coins in the British Museum*, volume i, *The Coins of the Eastern Khaleefehs*, London, 1875, par Stanley Lane Poole, p. 189, figure la monnaie no. 74, pl. VIII, qui porte une courte légende pehlevie, donnant comme l'atelier de frappe Rai. Une monnaie identique existe en triple exemplaire au Cabinet des Médailles de Paris; elle a été publiée par Lavoix, *Catalogue des monnaies musulmanes de la Bibliothèque Nationale*, Paris, 1887, p. 387, no. 1473. Enfin I. Ghalib Edhem a publié une monnaie pareille du Musée Impérial Ottoman dans le *Catalogue des monnaies des Khalifes, types sassanides et byzantins, &c.*,

Constantinople, 1894, p. 92, no. 276, pl. II. Notons en passant qu'à Rai la mission américaine dirigée par le Dr. Eric Schmidt a recueilli en 1935 quatre monnaies analogues, et que nous avons acquis en 1936 à Téhéran une autre monnaie pareille. Toutes ces monnaies de Rai portent la date 116 de l'Hégire, sauf celle du Musée Impérial Ottoman qui a la date 113 de l'Hégire. D'ailleurs, deux monnaies d'argent, l'une publiée par Lane Poole, *Catalogue, &c.*, volume ix, *Early Mohammedan Copper Coinage of Syria imitated from the Byzantine*, London, 1889, p. 35, no. 156 q, pl. IV, et l'autre publiée par Lavoix, *op. cit.*, p. 68, no. 204, portent au droit le nom de l'atelier de frappe, Marv, en caractères pehlevis.

A l'exception de ces monnaies qui ont été frappées à Rai et à Marv, et d'une autre qui a été trouvée à Ištakhr et qui ne porte pas le nom de l'atelier, probablement toutes les pièces de cette série de monnaies arabes, presque toutes uniques, ont été frappées à Suse vers la fin du première siècle de l'Hégire. Les variétés des types sont assez grandes, ce qui nous fait penser que l'on a frappé un grand nombre de ces monnaies. D'ailleurs, comme nous venons d'apprendre, la mission américaine du Dr. Schmidt a recueilli en 1936 à Ištakhr quelques monnaies arabes à légendes pehlevies, dont une porte au droit un Pégase, comme une monnaie frappée à Suse, décrite plus bas, no. 21, et une autre recueilli par Mr. R. de Mecquenem à Persépolis, no. 22.

L'atelier de Suse a émis cinq types distincts de monnaies de bronze, à savoir: 1. le type sassanide, 2. le type byzantin, 3. le type de Calife, 4. le type de Pégase, et 5. le type arabe sans effigie. Le type

sassanide était en usage exclusivement en Iran, tandis que le type byzantin et le type de Calife étaient en cours en Syrie et également en Iran, jusqu'à environ l'année 75 de l'Hégire, quand la réforme monétaire d'Abd ul-Malik fut introduite. Le type sassanide est représenté invariablement par les monnaies à l'effigie de Chosroès II, connues, d'ailleurs, des drachmes des gouverneurs arabes. Le buste du roi est de face, la tête est tournée à droite; dans un seul cas, no. 5, la tête est tournée à gauche. Le type byzantin nous présente trois variétés du droit, à savoir: 1. l'empereur Héraclius, debout de face; comp. Lane Poole, *op. cit.*, vol. ix, pl. I, nos. 1 à 17; Lavoix, *op. cit.*, pp. 1-6, nos. 1-21; Stickel, *Das grossherzogliche Münzcabinet zu Jena*, II. Heft, *Älteste Muhammedanische Münzen bis zur Münzreform Abdulmeliks*, Leipzig, 1870, pl. I, no. 1. La monnaie no. 10 (v. plus bas) est inspiré par ce type. 2. L'empereur Héraclius, debout de face, ceint de l'épée, avec ses deux fils, Héraclius Constantin et Héracléonas, également debout de face, chacun tenant un globe; comp. Lane Poole, *op. cit.*, vol. ix, pl. I, no. 24; Lavoix, *op. cit.*, pp. 7-9, nos. 26-32; Stickel, *op. cit.*, pl. I, no. 15. Les fouilles de Suse nous ont fourni quatre monnaies de ce type, nos. 6 à 9, dont trois portent le nom de l'atelier Suse. 3. Buste de l'empereur Héraclius, de face; comp. Lane Poole, *op. cit.*, vol. ix, pl. I, nos. 31-32. Ce type est très probablement représenté par nos. 11 et 12 (v. plus bas), bien que le travail du buste soit barbare. En ce qui concerne le type à effigie de Calife, il a été en usage en Syrie, comme nous venons de remarquer. Lane Poole a publié plusieurs monnaies de ce type frappées à Haleb (Aleppo) et à Damas en Syrie, et une à Éliā (Jerusalem) en Palestine;

v. *op. cit.*, vol. ix, pl. II, no. 34-69; Ghalib, *op. cit.*, pl. I, no. 56; Stickel, *op. cit.*, pl. I, nos. 17, 29, et 34. Lavoix dans le *Catalogue* précité a reproduit deux monnaies de ce type, pl. I, no. 87, et Cottevieille-Giraudet en a publié sept autres dans la *Revue Numismatique*, Paris, 1935, pl. VIII, nos. 11 à 17, y comprises les deux monnaies publiées par Lavoix. Enfin, la collection Zubov, actuellement conservée au Musée Historique de Moscou, en possède une huitaine d'autres. Il faut remarquer que toutes ces monnaies frappées en Syrie ont les légendes bilingues grecques et arabes, exception faite des monnaies à l'effigie du Calife qui montrent seulement les légendes arabes. Le type de Pégase est une innovation dans cette série. Le Pégase est sans doute emprunté aux cachets sassanides, sur lesquels il figure très souvent. Pourtant il est très probable qu'il représente sur ces monnaies musulmanes le Borāq du Prophète. Le type de Pégase est rencontré aussi à Iṣṭakhr, comme nous avons dit plus haut.

Nous reprenons dans ce qui suit surtout l'étude des légendes pehlevies des cinq monnaies publiées dans le XX^{ème} volume des *Mémoires*, mentionnées plus haut, et de deux monnaies du British Museum publiées par Stanley Lane Poole, *op. cit.*, vol. i, p. 189, no. 74, et vol. ix, p. 35, no. 156 q, et de deux autres monnaies du Cabinet des Médailles, publiée par Lavoix, *op. cit.*, p. 68, no. 204, et p. 387, no. 1473, afin de présenter cette série intéressante dans son ensemble.

Table des légendes.

1	ه ل ه	2	س ل س	3	س ل س	4	ن ل ن	5	س ل س	6	د ن د
7	د س د	8	س ل س	9	س ل س	10	س ل س	11	س ل س	12	س ل س
13	س ل س	14	س ل س	15	س ل س	16	س ل س	17	س ل س	18	س ل س
19	س ل س	20	س ل س	21	س ل س	22	س ل س	23	س ل س	24	س ل س
25	س ل س	26	س ل س	27	س ل س	28	س ل س	29	س ل س	30	س ل س
31	س ل س	32	س ل س	33	س ل س	34	س ل س	35	س ل س	36	س ل س
37	س ل س	38	س ل س	39	س ل س	40	س ل س	41	س ل س	42	س ل س
43	س ل س	44	س ل س	45	س ل س	46	س ل س	47	س ل س	48	س ل س
49	س ل س	50	س ل س	51	س ل س	52	س ل س	53	س ل س	54	س ل س
55	س ل س	56	س ل س	57	س ل س	58	س ل س	59	س ل س	60	س ل س
61	س ل س	62	س ل س	63	س ل س	64	س ل س	65	س ل س	66	س ل س
67	س ل س	68	س ل س	69	س ل س	70	س ل س	71	س ل س	72	س ل س
73	س ل س	74	س ل س	75	س ل س	76	س ل س	77	س ل س	78	س ل س

DESCRIPTION DES MONNAIES.

[Les numéros entre parenthèses dans les descriptions suivantes se rapportent à la Table numérotée page 284.]

A. Émission de Suse.

I. Type sassanide.



1.

1. (Musée de Téhéran. — 1934.) Qolaibān ?, gouverneur de Suse. Buste de face de Chosroès II, profil à dr. ; lég. pehl. : à g. [1] *framūt*¹ “commandé ; ordonné” ; à dr. [2] *kholaibān* ou *golaibān*.²

Rev. Victoire, debout, de profil à g., tenant dans sa main droite une couronne ; lég. pehl. : à g. [3] *šūš* “Suse” ; à dr. [4] *rowāk*³ “courant ; en cours” ; au dr. et au rev. grènetis au pourtour — Diam. 15 mm. Poids 1 gr. 825.

[Pl. XXXIV.]

¹ Le mot *framūt* se lit sur deux autres monnaies de cette série, les nos. 6 et 21 ; sur une autre monnaie, le no. 11, il y a seulement la lettre initiale [57] *f* de ce mot. *Framūt* correspond exactement à l'expression arabe *مما امر* “par ordre de” des monnaies des Califes omayyades et abbassides.

² Étant donné l'ambiguïté des caractères pehlevs, il est difficile de deviner le vrai nom du gouverneur. En tous cas, la forme du nom est diminutive du *قَلْب* “cœur”, *قَلْبِ* “petit cœur”, tandis qu' *-ān* final est la terminaison formant les patronymiques en pehlevi.

³ De *raftan* “aller ; marcher” ; *ravēt* “il va ; il marche” ; pour *rowāk* comp. persan moderne *روا* “ce qui est permis”. La lecture de ce mot est maintenant bien assurée, grâce à deux monnaies bilingues sur lesquelles nous avons son équivalent arabe *جائ* “qui peut passer”, fréquent sur les monnaies arabes de cette époque, v. plus bas les nos. 23 et 24, et comp. Lane Poole, *op. cit.*, vol. ix, pl. I, nos. 4 à 9. D'ailleurs, sa rencontre sur dix-sept autres monnaies de cette série nous permet de constater que ce mot ne peut pas être lu *dōbār* “deux fois” (lepton), comme le Colonel Allotte de la Fuyé l'a proposé (v. *Mémoires*, vol. xx, p. 51,

2. (Musée de Téhéran. — 1937.) *Dēnān*?, gouverneur de Suse. Même type du droit qu'au no. 1; lég. pehl.: à g. [5], peut-être *x^varraḥ* "gloire"; à dr. [6] *Dēnān*; dans le champ, en bas, à dr. ••



2.

Rev. Dans le champ, lég. pehl. en quatre lignes: [7] *ēvak-sī[h]*⁶ *šūš rowāk*, qui donne comme la date de frappe l'année 31, peut-être pour 131 de l'Hégire?; au dr. et au rev. traces de grènetis. — Diam. 20 mm. Poids 1 gr. 100.

[Pl. XXXIV.]

3. (British Museum. — Communiquée par Mr. J. Walker.) Même type du droit qu'au no. 1; lég. pehl. à g. [8] *x^varraḥ*; à dr. [9] *afzūt* "que soit augmenté!"

Rev. Dans le champ, lég. en trois lignes: [10] dont la lecture reste douteuse; traces de grènetis au dr. et au rev. La médaille est très fruste. [Pl. XXXIV.]

4. (British Museum. — Communiquée par Mr. J. Walker.) Même type du droit qu'au no. 1; lég. pehl.: à g. indistincte; à dr. [11]?

et le no. 25), d'après l'étude de trois monnaies, ayant ce mot, jusqu'alors connues. Les lettres sont imparfaites sur presque toutes les monnaies; le trait vertical du [58] est court, et il manque au [59] la boucle supérieure. De plus, leurs poids ne correspondent pas au poids normal d'un dilepton de 2 gr. 25, mentionné par le Colonel (*ibid.*).

⁴ *Dēn*, avesta *daēnā* "religion", avec le patronymique *-ān*; comp. *Dēnak*, nom d'une reine, v. inscription sassanide de Naqshe-Rustam, l. 24 et 27; la reine d'Yazdagard II s'appelait aussi *Dēnak*.

⁶ Nous avons ici très probablement la date de la frappe de cette monnaie, comme au revers de monnaies, nos. 26 à 28 dans la première ligne. Si notre lecture est correcte, il y a un crochet de plus en *sī(h)*. La forme correcte serait [60]. Dans ce cas il faut supposer que la date soit 131 de l'Hégire, avec l'omission de la centaine, comme le Colonel Allotte de la Fuyé le fait (v. plus bas la note 19).

Rev. Dans le champ, lég. en trois lignes: [12] --- *nēwaki(h)t afzūt* "que ta bonté soit augmenté!" la lecture reste douteuse; au dr. et au rev. grènetis au pourtour. La médaille est très fruste. [Pl. XXXIV.]



5.

5. (Cabinet des Médailles, provenant de Suse, trouvaille de la Mission de Morgan.) Buste de face, imitant celui de Chosroès II, profil à g., le cou est mince et long; lég. pehl.: à g. [13]?; à dr. ••; traces de grènetis au pourtour.

Rev. Dans le champ, lég. bilingue cufique et pehl. en trois lignes: [14] *بسم الله* *šūš rowāk*; traces de grènetis au pourtour, divisé en quatre segments égaux par quatre annelets, dont seulement un est dans le flan.

II. Type byzantin.

6. (Cabinet des Médailles; v. *Mémoires*, xx, p. 52.) Effigie de l'empereur Héraclius, debout de face, ceint de l'épée, avec ses deux fils Héraclius Constantin et Héracléonas, également debout de face, grènetis au pourtour.

Rev. "Au centre de la pièce, un grand M; au-dessous, une barre horizontale; au-dessus de la barre, une sorte de croissant, les cornes en bas, qui n'est peut-être qu'un A, non-barré, très aplati; en dessus de M, une croix pattée" (d'après le Colonel Allotte de la Fuÿe); lég. pehl. en trois lignes: à dr. [15] *yāc*;° en exerg. [16] *framūt*; à g. [17] *stān*,⁷ grènetis au pourtour.

⁶ *Yāc* est toujours suivi par le mot pour la dizaine qui manque ici. Nous pensons que cette monnaie a été frappée pendant le règne d'Abd ul-Malik, qui dura de l'an 65 jusqu'à l'an 84 de l'Hégire. Ainsi nous avons le choix entre les dates 71 et 81 de l'Hégire. En tout cas, la lettre [61] ne peut pas être considérée comme étant une abbréviation de [62] *panč(j)āh* "cinquante", comme le Colonel le propose.

⁷ -*stān* serait la deuxième partie du nom d'un pays, fréquente

7. (Cabinet des Médailles. — 1936.) Même droit qu'au no. 6.

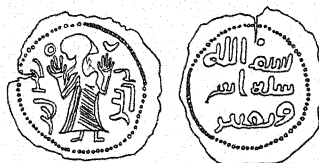
Rev. Dans le champ, lég. pehl. en trois lignes : [18] — ? — šuš rowāk; grènetis au pourtour. — Diam. 18 mm. Poids 1 gr. 375.

8. (Cabinet des Médailles. — 1937.) Même description qu'au no. 7. — Diam. 16 mm. Poids 0 gr. 725.

[Pl. XXXIV.]

9. (Musée de Téhéran. — 1936.) Même description qu'au no. 7. — Diam. 19 à 20 mm. Poids 1 gr. 975.

[Pl. XXXIV.]



10.

10. (Cabinet des Médailles. — 1934.) Personnage debout de face, figure effacée, vêtu d'une longue robe, les mains, de face, relevées dans la posture byzantine; dans le champ, au-dessus des mains, à dr. un croissant, à g. une étoile ou bien le soleil; lég. pehl. : à g. [19] šuš; à dr. [20] rowāk.

Rev. Dans le champ, lég. cufique, en trois lignes :
 ٩ وثمانين | سنة أربع (?) | بسم الله qui donne comme la date de la

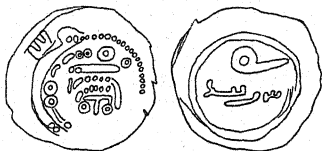
en pehlevi; pourtant il est très probable qu'il s'agisse ici du nom d'un gouverneur, avec le patronymique en -ān.

* La lecture de ce mot est très douteuse. La lettre initiale est sûrement un [63] b. Le groupe des lettres qui suivent [64] peut être lu sī "trente", comp. sē-sī, au no. 26. En tous cas, il s'agit ici de l'année de la frappe de cette monnaie; alors il est probable qu'il faut lire [65] no(h)-sī "trente-neuf". Ou bien, ne s'agit-il pas ici du nom d'un gouverneur de Suse Būndiyār?

* Cette forme avec la suppression d'Alif est fréquente sur les monnaies de cette époque, au lieu de la forme classique ثمانين; aussi ثمننة, v. O. Codrington, *A Manual of Musalman Numismatics*, London, 1904, p. 6.

Cette monnaie est donc postérieure à la réforme monétaire

frappe l'année 84 de l'Hégire; un point au-dessus de م de نسم; au dr. et au rev. grènetis au pourtour. Diam. 18 à 19 mm. Poids 2 gr. 850. [Pl. XXXIV.]



11.

11. (Musée de Téhéran. — 1934.) Tête d'homme, de face, traitée très sommairement; entre deux cercles linéaires, lég. circulaire illisible.

Rev. Dans le champ, lég. pehl. en deux lignes, peu lisible: [21] *f(ramüt)*¹⁰ *hubahr*¹¹ "commandé par Hubahr"; au dr. et au rev. grènetis au pourtour. — Diam. 19 mm. Poids 1 gr. 325. [Pl. XXXIV.]

12. (Cabinet des Médailles; v. *Mémoires*, vol. xx, p. 44, no. 62, fig. 6). Même type du droit qu'au no. 11; dans le champ, à g. une croix; en haut, légende latine (grecque?) barbare: VAC; grènetis au pourtour.

Rev. Dans le champ, lég. pehl. en quatre lignes, dans la quatrième: [22] *rowāk*.

III. Type de Calife.

13. (Cabinet des Médailles. — 1936.) Effigie de Calife, debout de face, figure effacée, coiffé du *Kūfryāh*, posant la main droite sur le cimenterre dans l'attitude de l'Imām,

d'Abd ul-Malik qui a été inaugurée, d'après les uns, en l'an 75, d'après les autres, en l'an 77 de l'Hégire. M. Lavoix remarque, en parlant de cette réforme, qu'elle était en vigueur à Basrah, à Djeyy, et à Suse en l'an 79 de l'Hégire (*Catalogue*, &c. p. xx). Il paraît pourtant qu'elle était en vigueur seulement pour les dinars en or et les dirhams en argent, tandis qu'on frappait les folous de bronze avec les anciens coins aux effigies sassanides et byzantines, aux légendes pehlevies, latines et arabes.

¹⁰ v. note 1.

¹¹ C'est-à-dire "celui qui a la bonne part; heureux".

quand il récite le *Khutbah*¹²; lég. pehl.: à g. [23] *šūš*; à dr. [24] *afzūn* "croissance; prospérité".

Rev. Pyrée sassanide flamboyant; lég. pehl.: à dr. [25] *rowāk*; au dr. et au rev. grènetis au pourtour. — Diam. 14 à 15 mm. Poids 0 gr. 887-5. [Pl. XXXIV.]

14. Une monnaie analogue est publiée dans *Mémoires*, vol. xxv, pl. VIII, appendice II; mais par une erreur, le texte, p. 132, donne la description d'une monnaie d'Artaxerxès V, roi de Persis.



15.

15. (Musée de Téhéran. — 1934.) Même droit qu'au no. 13; lég. pehl.: à g. [26] *šūš*.

Rev. Pyrée sassanide flamboyant, orné de bandelettes sur les deux côtés; la flamme est effacée; au dr. et au rev. deux cercles de grènetis au pourtour. Diam. 15 mm. Poids 1 gr. 375. [Pl. XXXIV.]

16. (Cabinet des Médailles. — 1935.) Même droit qu'au no. 13; lég. pehl.: à g. [27] *šūš*.

Même revers qu'au no. 13; lég. pehl.: à dr. [28] *rowāk*; au dr. et au rev. grènetis au pourtour. Diam. 16 mm. Poids 1 gr. 750. La médaille est abîmée. [Pl. XXXIV.]

17. (Musée de Téhéran. — 1935.) Même droit qu'au no. 13; lég. pehl.: à g. [29] (*šūš*)¹³; à dr. [30] *afzūn*.

¹³ En ce qui concerne cette effigie du droit, nous citons, d'après Lavoix (*op. cit.*, pp. xiv et xv), l'historien de la monnaie arabe, Makrizy, qui dit que le Khalif Mu'āwiyah fit frapper les dinars sur lesquels il était représenté ceint d'une épée. Les monnaies à l'effigie de Calife ont été émises du temps de Mu'āwiyah ibn Abī-Sufyān jusqu'au temps d'Abd ul-Malik, dont le Cabinet des Médailles possède deux dinars, l'un de l'an 76 et l'autre de l'an 77 de l'Hégire. Ce sont les dernières monnaies de cette catégorie. Les monnaies de ce type à effigie de Calife sont très nombreuses, comme nous avons remarqué plus haut.

Rev. Même revers qu'au no. 13; lég. pehl.: à g. [31] *pērocīh* "Victoire", presque effacée; à dr. [32] *rowāk*. Diam. 15 mm. Poids 1 gr. 175. [Pl. XXXIV.]



18.

18. (Cabinet des Médailles. — 1934.) Même droit qu'au no. 13; la figure de Calife est effacée; lég. pehl.: à g. [33] *šūš*; à dr. [34] *afzūn*.

Rev. Dans le champ. lég. pehl.: en trois lignes: [35] —? —¹³ *ān u rowāk*; étoile à huit branches au-dessus du [36] du [37]; au dr. et au rev. grènetis au pourtour. Diam. 15 mm. Poids 0 gr. 800. [Pl. XXXIV.]

19. (Cabinet des Médailles. — 1937.) Même droit qu'au no. 13; lég. pehl.: à g. [38] *šūš*; à dr. [39] *af(zūn)*.

Rev. Dans le champ, lég. pehl. en trois lignes: [40] —? — *rowāk*; au dr. et au rev. grènetis au pourtour. Diam. 16 mm. Poids 1 gr. 275.



20.

20. (Musée de Téhéran. — 1936.) Même droit qu'au no. 13; la coiffure du personnage paraît ornée sur le devant de trois aigrettes(?)¹⁴; lég. pehl.: à g. presque effacée,

¹³ La légende est très fruste, la lecture du premier mot reste incertaine. Ne serait-il pas à lire *framūt* ... *ān* "commandé par ...; par ordre de"? comp. *framūt Qolāibān* du no. 1. La lecture *farroʿī(h)* "bonheur, auspiciousness" est aussi possible.

¹⁴ M. Cottevieille-Giraudet, dans le post scriptum de son article intitulé "La Collection Decourdemanche", *Revue Numismatique*, Paris, 1935, p. 228, a remarqué deux séries dans les monnaies à l'effigie de Calife, frappées en Syrie, l'une la beaucoup plus nombreuse qui représente le Calife la tête découverte, les cheveux

finissant par [41] -?-; à dr. [42] *dāt(u)*? le nom du gouverneur?

Rev. Dans le champ, un arbre stylisé avec des branches courbes¹⁵; lég. pehl.: à dr. [43] *rowāk*; celle de g. manque; au dr. et au rev. grènetis au pourtour. Diam. 15 à 17 mm. Poids 1 gr. 650. [Pl. XXXIV.]

IV. Type de Pégase.



21.

21. (Musée de Téhéran. — 1935.) Pégase galopant à dr.; à g. au-dessus de la queue ••; lég. pehl.: en haut: [44] *farroxih* "bonheur; auspiciousness"; en bas: [45] *pērocih* "Victoire"; deux cercles de grènetis au pourtour.

Rev. Dans le champ, lég. pehl., en quatre lignes: [46] *dāt*¹⁶ --- *framūt šuš rowāk* "ordonné par Dāt ---"; en cours à Suse"; trois annelets entre deux cercles de grènetis du pourtour. Diam. 20 mm. Poids 1 gr. 950. La médaille est abîmée. [Pl. XXXIV.]

22. (Cabinet des Médailles; v. *Mémoires*, vol. xx, p. 46, fig. 7.) Même description qu'au no. 21. La médaille est très abîmée. Poids 1 gr.

longues partagés par une raie médiane, l'autre la plus rare où la tête porte une coiffure. Nous n'acceptons pas cette opinion. Il s'agit ici du *kūfiyah*, la coiffure nationale arabe, comme Mr. J. Walker a déjà remarqué, v. *Numismatic Chronicle*, 1935, p. 125 et 1937, pp. 321-323, avec ou sans ornement des aigrettes. L'atelier de Suse a émis aussi ces deux séries, la première comprend sept monnaies, les nos. 13 à 19, et la deuxième est représentée par une seule pièce, le no. 20.

¹⁵ Serait-il peut-être le pyrée sassanide stylisé, à ornement des bandelettes, comme nous avons noté sur trois drachmes d'argent de Chosroès II, provenant du trésor trouvé à Suse en 1929 (v. *Mémoires*, vol. xxv, p. 73, note 3).

¹⁶ La seconde partie du nom du gouverneur manque; comp. le no. 20 qui a au droit seulement *Dāt(u)*.

V. Type sans effigie, à légendes pehlevie-arabes.

23. (Musée de Téhéran; v. *Mémoires*, vol. xxv, p. 126, no. 232, figurée p. 132 B.) Dans le champ, lég. pehl. en trois lignes: [47] - ? - šuš - ? -.¹⁷

Rev. Dans le champ, lég. cufique en trois lignes: [48];¹⁸ à dr. et au rev. grènetis au pourtour. Diam. 21 à 23 cm. Poids 2 gr. 550.

24. (Cabinet des Médailles; v. *Mémoires*, vol. xxv, p. 126, no. 231, figurée p. 132 B.) Dans le champ, lég. pehl., en trois lignes: [49] d - - - šuš - - .

Rev. Dans le champ, lég. cufique, en trois lignes: [50]; à dr. et au rev. grènetis au pourtour. Diam. 21 mm. Poids 2 gr. 850.

25. (Cabinet des Médailles; v. *Mémoires*, vol. xx, p. 48 et seq., pl. II, no. 1.) Dans le champ, lég. pehl., en trois lignes: [51] - ? -¹⁹ šuš rowāk.

Rev. Dans le champ, lég. cufique, en trois lignes: الله | محمد | رسول | الله; au dr. et au rev. trois annelets entre deux cercles de grènetis.

¹⁷ La première ligne de la légende du droit du no. 24, qui est une monnaie analogue à celle-ci, a une lettre [66] qui pourrait être, à la rigueur, un *d* de l'écriture pehlevie de l'époque tardive; au-dessus d'elle il y a un point, dont la signification n'est pas claire. Quant au [67] de la troisième ligne de la légende du droit, il y a une variante [68] au no. 24. Ces deux mots restent obscures. Pour le deuxième mot nous proposons la lecture *rowāyēt*, pers. mod. روایت, "tradition" sous toute réserve.

¹⁸ واف "juste en poids, *vollwichtig*" est une supposition. Ce mot n'est pas non plus complet au no. 24. Le cas est le même pour جائز "qui peut passer; courant"; comp. Lane-Poole, *op. cit.*, vol. ix, pl. I, nos. 4 à 14. C'est un équivalent de [69] rowāk, v. note 3.

¹⁹ Le Colonel Allotte de la Fuyé propose les lectures *AIUKII* "1" et *SITChSI* "33", qui pourraient être pour l'année 101 et 133 de l'Hégire, avec l'omission de la centaine (*Mémoires*, vol. xx, pp. 49-50). Ce mot a une variante [70] aux nos. 26 et 27, qui admet seulement la lecture sē-sī "33".

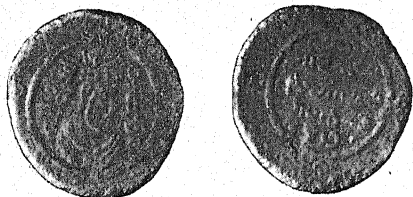
26. (Musée de Téhéran. — 1935.) Dans le champ, lég. pehl. en trois lignes [52] *sē-sē šūš rowāk*, qui donne comme l'année de frappe 33 (?).

Rev. Dans le champ, même légende qu'au no. 25 ; au dr. et au rev. deux cercles de grènetis. Diam. 23 mm. Poids 2 gr. 225. [Pl. XXXIV.]

27. (Cabinet des Médailles. — 1935.) Même description qu'au no. 26. Diam. 22 mm. Poids 2 gr. 350. La médaille est abîmée.

28. (Cabinet des Médailles. — 1935.) Un fragment d'une monnaie pareille au no. 26. Elle a au dr. lég. pehl. : [53] *šūš*, et au revers lég. cufique : الله

B. Émission d'Iṣṭakhr ?



29.

29. (Cabinet des Médailles ; v. *Mémoires*, vol. xx, p. 75, fig. 5 ; provenant d'Iṣṭakhr-Persépolis.) Al-Manṣour. Buste de face de Chosroès II, profil à dr. ; lég. verticale cufique : à dr. منصور ; à g. العز لله "la gloire est à Allāh" ; grènetis au pourtour ; en marge, quatre croissants à étoile dont seulement celui de gauche n'est pas effacé.

Rev. Dans le champ, lég. pehl. en cinq lignes : [54] ---?---²⁰ *dāt-pērōč i mansūr* (?) "--- de Dātpērōč, (fils)

²⁰ [71] et les trois autres mots suivants donnent probablement le nom du gouverneur d'Iṣṭakhr qui a fait frapper cette monnaie, avec ceux de son père et grandpère. La lecture *Dātpērōč* nous paraît être certaine ; le nom signifierait "victorieux par la loi". *MTN* = *Mithra* ou *Mihr*, le nom d'une des Yazats zoroastriens, est peut-être la deuxième partie du nom *ADMTN*. Les autres noms restent obscures, tant pour leurs lectures que pour leurs significations.

Il est intéressant à remarquer que Lane Poole a publié dans le

de Mansūr---"; grènetis au pourtour; en marge, quatre croissants à étoile dont celui du haut est effacé.

C. Émission de Rai — Rhagès.

30. (British Museum; v. Lane Poole, *op. cit.*, vol. i, p. 189, no. 74.) Dans le champ, lég. bilingue cufique et pehl., en quatre lignes: [55] *rai*²¹ *rowāk*, c'est-à-dire "Allāh a ordonné (l'observation) de la justesse du valeur (du métal) et du poids; en cours à Rai."

Rev. Dans le champ, lég. cufique, en quatre lignes: بسم الله | ضرب هذا | الفلّس بالرى سنة ست | عشر و مية; deux points sur الله d' au-dessous de la quatrième ligne; les mots ست et مية sont en partie effacés; au dr. et au rev. grènetis au pourtour. La monnaie a été frappé à Rai en l'an 116 de l'Hégire.

31. (Cabinet des Médailles; v. Lavoix, *op. cit.*, p. 387, no. 1473.) Même description qu'au no. 30. Diam. 20 mm. Poids 1 gr. 75. Lavoix appelle le côté de la monnaie qui donne la date le côté droit. Cette monnaie existe au Cabinet des Médailles en trois exemplaires.

32. (Collection de l'auteur.) Même droit qu'au no. 30.

Rev. Dans le champ la même légende cufique, en quatre lignes, mais différemment arrangée, comme suit: بسم الله | ضرب هذا | لفلّس بالرى سنة | (ست) عشر و مية; grènetis au pourtour. La marge de cette monnaie est découpée de telle sorte qu'elle affecte la forme octogonale. [Pl. XXXIV.]

Catalogue précité, vol. i, p. 194, no. 85, Pl. VIII, une monnaie aux légendes entièrement arabes, datée de l'année 132 de l'Hégire, qui a au droit le buste de Chosroès II, de profil à dr. avec les légendes arabes; à g. محمد et à dr. رسول الله. Cette monnaie nous rappelle notre monnaie d'al-Mansour. Le nom d'atelier de cette monnaie سلسرار reste douteux. Ainsi, soixante ans après la réforme monétaire d'Abd ul-Malik nous avons encore des monnaies à l'effigie de Chosroès II.

²¹ C'est le nom de l'atelier de Rai, l'ancien Rhagès. Il est certain que [72] du Colonel (*Mémoires*, vol. xx, p. 51) et [73] de Lavoix (*op. cit.*, p. 387, no. 1473) sont dus à une copie inexacte.

33. (Musée Impérial Ottoman; v. I. Ghalib, *op. cit.*, p. 92, no. 276 et pl. II.) Même description qu'au no. 30, sauf la date qui est 113 de l'Hégire.

D. *Emission de Marv.*

34. (British Museum; v. Lane Poole, *op. cit.*, vol. ix, p. 35, no. 156 q, pl. IV.) Dans le champ, lég. bilingue cufique et pehl. en quatre lignes: [56] لا إله إلا الله وحده لا شريك له | *Marv(u)*; lég. circulaire cufique: بسم الله ضرب هذا الدرهم بمرور في سنة واحد ثمانين |, donnant comme date de frappe l'année 81 de l'Hégire.

Rev. Dans le champ, lég. cufique en quatre lignes: الله احد الله | صمد لم يلد | ولم يولد ولم يكن | له كفوا احد | lég. circulaire cufique: محمد رسول الله ارسله بالهدى ودين الحق ليظهره | على الدين كله | trois cercles de grènetis au droit et au revers. \bar{A} 26 mm. Poids 2 gr. 72.

35. (Cabinet des Médailles; v. Lavoix, *op. cit.*, p. 68, no. 204.) Même description qu'au no. 34. \bar{A} Poids 2 gr. 75.

J. M. UNVALA.

XVIII.

INDIAN COINS ACQUIRED BY THE BRITISH MUSEUM.

[SEE PLATE XXXV.]

SINCE the publication of my last paper on the British Museum's Indian acquisitions in the *Num. Chron.*, 1934, pp. 229-243, a number of interesting coins have been acquired, of which the following are the more important:

GUPTA.

Candragupta II.

Archer Type, Class II, var. ϵ .

The following coin is a new variety of this type:

Obv.

King standing, dressed as usual, head to l., holding bow in r. hand on l. and arrow in l. hand.

Candra between bow-string and king's body.

Around: *Deva-Srī-mahārājā-dhirāja-Srī—ndragu ptaḥ.*

Rev.

Lakṣmī seated facing on lotus.
Srī-Vikramaḥ.

A. 75. Wt. 121. [Pl. XXXV. 1.]

KALACURIS OF TUMMĀNA.

Dr. H. C. Ray in his *Dynastic History of Northern India*, vol. ii (1936), p. 742, note 1, has suggested that the Kalacuris of Ratnapura, called by Cunningham (*C.M.I.*, p. 73f.) Kalacuris of Mahākosala, should rather be called of Tummāna, as they themselves claim to be

Tuṃmānādhipati. The Museum acquired three very rare coins of this dynasty from the Amsterdam sale (Schulman) of April 26-27, 1937. The obverse type is almost unintelligible; Hoernle has called it a crude figure of Hanuman. The monkey head and tail are clear, but there may be more than one figure involved.

Prthvīdeva I (A.D. 1060-90).

Obv.

Rev.

Hanuman.

Srīmat-Prthvīdeva.

N 7. Wt. 14.5. [Pl. XXXV. 2.]

A quarter dināra is a new denomination for this reign.

Jajalladeva (A.D. 1090-1120).

Obv.

Rev.

Hanuman.

Srīmaj-Jajalladeva.

N 8. Wt. 61.5. [Pl. XXXV. 3.]

Ratnadeva II (A.D. 1120-35).

Obv.

Rev.

Hanuman.

Srīmad-Ratnadeva.

N 8. Wt. 61. [Pl. XXXV. 4.]

The dināra in fine gold of this reign seems to be new; the only denomination hitherto known is the very base quarter dināra from a find at Chattigarh in 1893.

I have retained the traditional attribution of these coins, but in view of the probability that Prthvīdeva I was still a feudatory, and that the dynasty only became completely independent in the reign of Jajalladeva I,

it is not improbable that some, at least, of the coins should be attributed to Prthivīdeva II. The same is true of the distribution of coins between Jajalladeva I and II and Ratnadeva II and III.

KASHMĪR.

Obv.

Rev.

Haṃsa to l. Traces of inscription.

Lakṣmī seated facing.

A 6. Wt. 54.2. [Pl. XXXV. 7.]

This coin, which was recently presented to the Museum by Mr. T. B. Copeland, C.I.E., may be attributed, like the rare gold coins of Harṣa, to Kashmīr; indeed, the probable date of the coin would suit his reign quite well (A.D. 1089–1101).

UNCERTAIN MEDIEVAL HINDU.

VATSADĀMAN.

Obv.

Rev.

Viṣṇu to r. trampling on demons.

Cow to l. suckling calf.
Around: Śrī-Vatsadāmanā-rāyaṇ[—]

A 8. Wt. 116.5 [Pl. XXXV. 5.]

This coin with a legend in Brāhmī characters of the ninth century has recently been acquired. It was originally published by Rapson in *J.R.A.S.*, 1900, p. 123. I am unable to add anything to his notes except to call attention to the coins with similar reverse type which have recently been discussed by Mr. Ajit Ghose in *Num. Chron.*, 1933, pp. 139–142.

GARHAMANDALA.

*Śaṅgrāma Śāhi.**Obv.**Rev.*

Lion to l. with sun above.

Telugu legend in centre.

Around: *Pulastavaṁsa Śrī-*Around: *Śrī-Pulastavaṁsa-**Śaṅgrāma-Śāhi Samvat**Śrī-Śaṅgrāmadeva.*

1600.

Śake 1600. A .95. Wt. 167.5. [Pl. XXXV. 6.]

This unique coin was presented to the Museum by the late Mr. Robert Sutcliffe.

*Colas.**Obv. and Rev.*

Tiger and fish and legend in Telugu characters of the eleventh to twelfth century.

A .6. Wt. 58. [Pl. XXXV. 9.]

As I cannot read the legend with any degree of certainty I would call attention to the reproduction in the plate and would be glad of any suggestions. The legend seems to end *Cola*.

*Calukya.**Obv.**Rev.*

Boar r., crescent moon and sun above.

Floral design.

A .5. Wt. 58. [Pl. XXXV. 8.]

This coin, with obverse type very similar to Elliot, *C.S.I.*, no. 23, adds another to the few early Calukya coins.

SULTANS OF BENGAL.

Nasir al-Dīn Nasrat Shāh (A.D. 1518-32).

<i>Obv.</i>	<i>Rev.</i>
السلطان	نصرت شاه السلطان
بن السلطان ناصر	بن حسين شاه السلطان
الدنيا و الدين	الحسينى خلد الله ملكه
ابو المظفر	۷۳۲ - - - -

A.H. 937. *AV* .7. Wt. 164.5. [Pl. XXXV. 10.]

This adds another to the rare gold coins of Bengal. I am unable to read the mint-name. It might be Husenabad or the Treasury mint, but looks more like غرچين.

MOGHUL EMPIRE.

Humāyūn.

The following coin, recently presented by Mr. J. B. Howe, is probably the earliest gold coin issued by a Moghul in India.

<i>Obv.</i>	<i>Rev.</i>
In lozenge	Kalima and names and
Around: محمد همايون غازي	epithets of first four
	caliphs around.
السلطان الاعظم خا(قان)	
المكرم خلد الله تعالى ملكه و سلطانه	
ضر(ب) آگر(ه)	

Agra. *AV* .8. Wt. 61.4. [Pl. XXXV. 11.]

*Akbar.**Obv.*الله
أكبر*Rev*۳۵ الهی
جل جلاله

with rosettes in double
square as *B.M.C.*, no. 163.

A .75. Wt. 168, year 35. [Pl. XXXV. 12.]

This rare type was hitherto only known of the
year 32.

Obv.

ضرب فلوس قندهار

Rev.

۵۱ مهر الهی

Kandahār: 51 Mihr. *Æ* .8.

This coin, which was found at Quetta, adds a new
mint to Akbar's reign.

*Jahāngīr.**Obv.*

اکبر شاه

Rev.

یا معین

شاه

ضرب اجمیر ۱۰

جهانگیر ۱۰۲۴

Ajmr 1024:10. *A* .45. Wt. 42.3. [Pl. XXXV. 14.]

This unique coin, described by Mr. R. B. Whitehead
in *Num. Chron.*, 1930, p. 206, has now been acquired
by the British Museum. Of the same date and mint
is the following *niṣār* from the Bleazby collection:

Obv.

نکیر شاه

Rev.

اجمیر

نثار جها

ضرب سنه ۱۰

Ajmr, year 10. *A* .3. Wt. 17.

<i>Obv.</i>	<i>Rev.</i>
Sagittarius.	همیشه بادا بدروی سکه لاهور ز نام شاه جهانگیر شاه اکبر نور
	۱۰۳۶:۲۱

Lahore, 1036:21. *A* 9. Wt. 168. [Pl. XXXV. 15.]

This very rare zodiacal type described by Mr. Whitehead in *Num. Chron.*, 1931, p. 130, is now in the Museum.

ASSAM.

Since the publication of my account of the coinage of Assam in *Num. Chron.*, 1909, pp. 300-331, the Museum has acquired a number of coins of which the following are worthy of record:

Śuklenmung (A.D. 1539-52).

Obv. and *rev.* as *Num. Chron.*, 1909, Pl. XXIII. 1; round instead of octagonal. This is the only round Assamese coin that I have seen.

R 95. Wt. 167.5.

Śiva Simha with *Phuleśvarī* (A.D. 1714-31).

Obv. and *rev.* as *Num. Chron.*, 1909, Pl. XXIII. 14; but date Śāke 1646 on obverse.

A 1. Wt. 176.

Pramatta Simha (A.D. 1744-51).

Muhur.

Obv. and *rev.* as in *Num. Chron.*, 1909, Pl. XXIV. 8; but date 1669.

A 9. Wt. 175.

This appears to be the first recorded gold coin of this ruler.

Rājesvara Simha (A.D. 1751-69).

Half Muhur.

Obv.

*Srī-Srī Rā-
jesvara-si-
mha nṛpasya*

Rev.

*Srī-Srī-Si-
vapadaparā-
yaṇasya*

A 75. Wt. 87.2. [Pl. XXXV. 16.]

One-eighth Muhur.

Obv.

*Srī-Srī-Rā-
jesvara—*

Rev.

*simha-
nṛpasya*

A 5. Wt. 21.

Both these denominations are new to this reign.

Gaurinātha Simha (A.D. 1780-96).

Obv.

*Srī-Srī Svarga-
deva-Śrī Gaurinā-
thasimha-nṛpasya*
Sāke 1705

Rev.

*Śrī-Śrī-Hara-
Gauricārṇāra-
vindamakaranda-
madhukarasya*

A 95. Wt. 174.5.

Presented by Mr. A. W. W. Horsbrugh.

Obv.

As preceding, but date 1706.

Rev.

*Srī-Śrī-Śeva-
Gauricārṇa-
kamalamadhu-
karasya*

A 1. Wt. 175.

Obv. and *rev.* as muhur described in *Num. Chron.*, 1909, p. 324; but date 1707.

A 85. Wt. 173.8.

Candrakanta Simha (A.D. 1818-19).

Rupee.

Obv. and *rev.* similar to muhur described in *Num. Chron.*, 1909, p. 328, Pl. XXV. 13; but date 1742.

Æ .9. Wt. 175. [Pl. XXXV. 17.]

Presented by Mr. A. W. W. Horsbrugh.

Bhrajanātha Simha (A.D. 1818-19).

Quarter rupee.

Obv.

Rev.

*Srī-Srī-Bhra-
janātha Si-
mhanṛpasya*

Śāke 1739.

Æ .55. Wt. 43. [Pl. XXXV. 18.]

Presented by Mr. A. W. W. Horsbrugh.

Jogeśvara Simha (A.D. 1819).

The Museum now possesses the quarter rupee of this reign described in *Num. Chron.*, 1909, p. 329, Pl. XXV. 18.

J. ALLAN.

MISCELLANEA.

AN UNPUBLISHED NAVAL TYPE OF CARAUSIUS.

DURING my examination of a miscellaneous lot of surface-finds collected from time to time by Mr. Whiting from his fields at Magna Castra Farm, Kenchester (the Roman *Magnae*), the following *antoninianus* of Carausius recently came into my hands.¹



FIG. 1.

Obv. Q VIRTVSCAR AVSI Bust of Carausius l., wearing crested helmet and cuirass: the bowl of the helmet seems originally to have been decorated. Border of dots.

Rev. PACATRIXAV Galley to l., equipped with ram on the water-line, and showing seven oars (or groups of oars), and rudder. The hull is surmounted by a strip, running the length of the vessel, decorated with a zig-zag line with pellets in the angles. Above this are the half-length figures of three soldiers, with rounded shields before them: the figure to extreme l. carries a spear. To the l. of these figures rises the superstructure of the prow, which contains three pellets and is surmounted by three projections; to the r., the superstructure of the stern, on which stands an eagle, head l. and wings half spread, holding

¹ Mr. Whiting has now very generously presented this remarkable coin to the Ashmolean Museum.

a wreath in its beak. Below the galley, → CANC.
Border of dots.

Æ. ↑↑ 23 mm. 3.00 gm. Figs. 1 and 2.

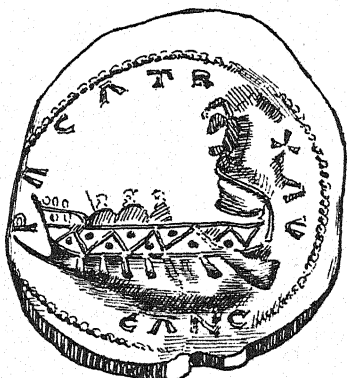


FIG. 2.

Originally the coin appeared to be in somewhat poor condition, the surface being partly covered by a layer of oxide sufficiently thick to make the reading of the letters AVSI on the obverse conjectural only. The cleaning of the coin, however, has made certain the correctness of this reading, and shows in addition the traces of ornament upon Carausius' helmet. It may be remarked that the portraiture is far removed from the style whereby the emperor is represented as a bull-necked and brutal giant: the features are those of a normal man and, indeed, might be those of almost any emperor in the later part of the third century.

The reverse offers some problems, both in its type and its legend and its "mint-mark". The ship itself is of an unusual, and unusually ornate, character; this is at once suggested by the triumphant figure of the eagle above the poop. There is no mast amidships (such as occurs very often on the naval *Laetitia Aug* (MC, QC) issues of Carausius and almost without exception on the *Virtus Aug* (QL, QC) coins of Allectus), the vessel being propelled only by its row of seven "oars" aside: these "oars" may, by analogy with other coins (see fig. 3), perhaps be taken as each representing at least two sweeps.² The ornamented band above the row

² For a lucid résumé on the subject of ancient ships, see W. W. Tarn, in *The Mariner's Mirror* (being the Quarterly Journal of the

of oars, though not uncommonly shown, is here more elaborate than usual with its "dog-tooth" decoration: here we probably have a representation of a kind of outrigger, designed to give a more or less even leverage to a bank of oars projecting from a curved hull;³ but it would be mistaken to see in the pellets, which are associated with the



FIG. 3.

"dog-tooth" ornament, stylized representations of the heads of the oarsmen, for the pellets continue far astern, beyond the end of the row of oars. The soldiers, or marines, upon the upper deck or central gangway are, again, by no means unparalleled, but they are here represented, in their armour, with uncommon emphasis; possibly the marks within the forecastle should be understood as indicating other soldiers.

Secondly, there is the question of the reverse legend. The reading of the I of PACATRIXAV is pretty certain, for, although the base of the letter concerned has been lost in the pitting of the coin's surface, I is clearly suggested by what remains of the head of the letter. What, then, is the significance of the legend PACATRIX AV[G]? To give the question another form, how should we best try to combine the various ideas of *peace* (suggested by *Pacatrix*), brought about by the *prowess* of *Carausius* (*Virtus Carausi*, *Au[g]*) through his *victory after war* (the *eagle*), into a single piece of feminine symbolism (*Pacatrix*)? For it is, indeed, the feminine form of the common epithet "*Pacator*" which makes the coin so remarkable. I suggest as a possible answer (and I am glad to have the independent corroboration of Sir Arthur Evans for my conjecture) that the

Society for Nautical Research), xix (January, 1933), no. 1, pp. 52 ff. For this reference I am indebted to Mr. Anthony Thompson; and it is Mr. Thompson's skilful pen that is responsible for the drawing of the present coin reproduced here as fig. 2.

³ Cf. Tarn, *loc. cit.*

vessel shown on the coin was thought of by the moneyer as "The Imperial Ship *Pacatrix*",—in fact, as Carausius's flag-ship or ship of state "The Lady Peacemaker".⁴ The occasion for the production of this coin might, then, have been the return of Carausius from his naval victory (bloodless or not) over Maximian in 289.⁵ What is quite certain is that the legend PACATRIX AV is not the chance invention of a semi-literate die-engraver. The style of the designs on both obverse and reverse is accomplished and even sophisticated; the legends are neatly and clearly cut and cleverly spaced, and nowhere among them is a faltering or vacillating stroke.⁶

If the coin was the work of a literate engraver, what is to be made of the letters which apparently form the mint-mark of the reverse? Taken as one word, CANC is meaningless. Nor does it seem possible to read M for N (i.e. CAM[ulodunum] C[olonia]), for the N is perfectly shaped. Even if it were not, it would be very hard to see why so remarkable a naval type should have been struck in Colchester: one would naturally assume that the engraver of this die was a man thoroughly familiar with the constant appearance of ships. But, if this argument suggests that C in any way indicates Clausentum as the mint-town of the present coin, it is equally hard to account for the remaining letters ANC.

C. H. V. SUTHERLAND.

A HOARD OF ROMAN COINS FROM MAGDALEN, NORFOLK.

DURING the sixties of the last century the Rev. W. B. Dalby, then Rector of Magdalen, near King's Lynn, Norfolk, acquired a small hoard of Roman coins which had been found locally: the exact locality and the circumstances of

⁴ Dr. J. G. Milne has drawn my attention to the feminine names given to ships on the coins of Corcyra at an earlier period: cf. Brit. Mus. Cat. Greek Coins, *Thessaly*, &c., pp. xlix, 129 ff. I do not know if there is any evidence for determining whether a fixed and general concept of the gender of ships prevailed among the ancients, but I suspect that they were frequently regarded as feminine: names such as "Argo" and "Salamina" occur readily to the mind.

⁵ Possibly celebrated also on the naval *Laetitia Aug* types already mentioned.

⁶ It may be noted that, of the six times the letter A occurs, it is barred only twice, in —CAR— and —XAV—.

the find are unknown. A few years ago the coins passed into the possession of the Rev. F. W. Morgan-Jones, now resident at Folkestone, and it is by his courtesy that I have been able to examine them. The coins submitted to me were as follows:

- 5 VALERIAN I *Lugdunum*: Mattingly & Sydenham, *Roman Imperial Coinage* (Vol. V, i-ii, by Percy H. Webb), no. 5 (2 coins, of A.D. 258).
Rome: *R.I.C.* no. 87 (3 coins, of A.D. 255-256).
- 1 VALERIAN II *Lugdunum* (posthumous): *R.I.C.* no. 9 (A.D. 257-258).
- 1 GALLIENUS *Rome*: as *R.I.C.* no. 169 (P |), but *rev.* (sole reign) — CONSERVA, and Apollo resting lyre on column.
- 1 SALONINA *Rome*: as *R.I.C.* no. 2, but *rev.* (sole reign) CONCORDIA —, and no mint-mark.
- 2 CLAUDIUS II *Rome*: *R.I.C.* nos. 104 (F) (but A |), 109 (K) (| E).
- 11 POSTUMUS *Lugdunum*: *R.I.C.* nos. 58 (C), 59 (C), 64 (C) (2 coins), 73 (C), 75 (C), 76 (C), 80 (C).
Cologne: *R.I.C.* nos. 311 (C), 315 (C) (2 coins).
- 6 VICTORINUS "Southern Mint": *R.I.C.* nos. 57 (F), 61 (F) (—ENTIA), 67 (C), 78 (C).
Cologne: *R.I.C.* nos. 114 (C) (* |), 118 (C) (V | *).
- [1 TETRICUS I *R.I.C.* no. 100 (C).]

Mr. Morgan-Jones tells me that there is some doubt whether the single coin of Tetricus should be included in the hoard: there is a possibility of its being an intruder. Its omission would allow us to classify the hoard as one of that interesting group which, buried probably in or soon after A.D. 268, shows a strong preference for the coins of Valerian and Postumus, which possessed a silver content, or at least a silvery face, far superior to the issues of Gallienus and Victorinus. In the present deposit, all the coins of

Valerian, and all but two of those of Postumus, are of fair quality, whereas the coins of Gallienus and Salonina are only faintly tinged with silver; and the latest coins in the hoard—those of Claudius II and Victorinus—are quite devoid of silver-wash. Hoards with a preference for the issues of Valerian and Postumus, and with the coins of Gallienus, Claudius, and Victorinus in a minority, are by no means common. Examples can be seen in the Selsey,¹ Luton,² and Stiffkey³ hoards; but such hoards are very quickly followed by others (represented by those found at Romsey,⁴ Haverfordwest,⁵ and Anglesey⁶) in which the superior coins of Valerian and Postumus are becoming more and more outnumbered by the miserable issues of Gallienus, Claudius, and Victorinus.

C. H. V. SUTHERLAND.

ROMAN BRITAIN AND NON-ROMAN CURRENCY.

In view of the increased attention now being given to the infiltration into Britain (both Roman and pre-Roman) of coins either of non-Roman mintage or of early Republican date, it may be of interest to record the details of six coins which the Ashmolean Museum has recently acquired from a collection formed locally in Kent in the area round Richborough, Sandwich, and Deal. There is no reason to throw doubt on this provenance with regard to the coins in question; the remainder of the collection was a characteristic agglomeration of Roman bronze coins, from the first century A.D. onwards, and including very few coins in good condition or of unusual types.

The six coins (all *Æ*) are as follows:—

Macedon: Philip II (Head, *H.N.*², p. 224, horseman).

Sicily: Akragas (*B.M.C. Sicily*, p. 21, no. 148).

Spain: Dianium (Vives, *La Moneda Hispanica*, ii, p. 133, no. 1).

Caria: Tabae (Trajan) (*B.M.C., Caria*, p. 169, no. 74).

Alexandria: Claudius I (Milne, *Catalogue of Alexandrian Coins in the Ashmolean Museum*, no. 71).

Triens of the Roman Republic, circa 217–197 B.C.

¹ *Num. Chron.*, 1933, p. 224.

² *Id.*, 1863, p. 112.

³ *Id.*, 1931, p. 316.

⁴ *V.C.H. Hants*, i, p. 346.

⁵ *Bull. Board Celt. Stud.*, iv (3), p. 268.

⁶ *Id.*, i (4), p. 346.

The composition of this list is not surprising for a locality such as the south-east corner of Kent—then, as now, England's chief point of connexion with the Continent and by implication in touch with constant maritime activity. It is somewhat more remarkable to find a group of conspicuously non-Roman coins in the South Midlands. For many years the late Mr. William Evetts, of Tackley Park, Oxfordshire, was an assiduous collector of all antiquities known for certain to have been found within the parish boundaries of Tackley. His collection of coins,¹ which the Ashmolean Museum has lately acquired, includes the following pieces (all *Æ*):—

Sicily: Mamertini (*B.M.C., Sicily*, p. 112, nos. 32 ff.).

„ Syracuse („ „ p. 218, nos. 598 ff.).

„ „ („ „ p. 227, no. 691).

Carthage (Müller, *Numismatique de l'ancienne Afrique*, ii, p. 95, nos. 168 ff.).

Greek—uncertain.

These coins were doubtless brought into the interior of the country in the course of trading: it must be remembered that the Akeman Street passes through the parish of Tackley. In conjunction with the Kentish finds described above and the discoveries already made elsewhere,² they leave no reason for doubting that the currency of Britain, in the Roman and even the pre-Roman period, was supplemented by a sprinkling of Greek and other “foreign” coins which, being in nearly all cases of bronze, would have been invariably welcomed at all times down to the reign of Antoninus Pius, in whose *Britannia* coinage the island was for the first time to enjoy a really ample supply of small change.

C. H. V. SUTHERLAND.

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FINDS OF COINS.

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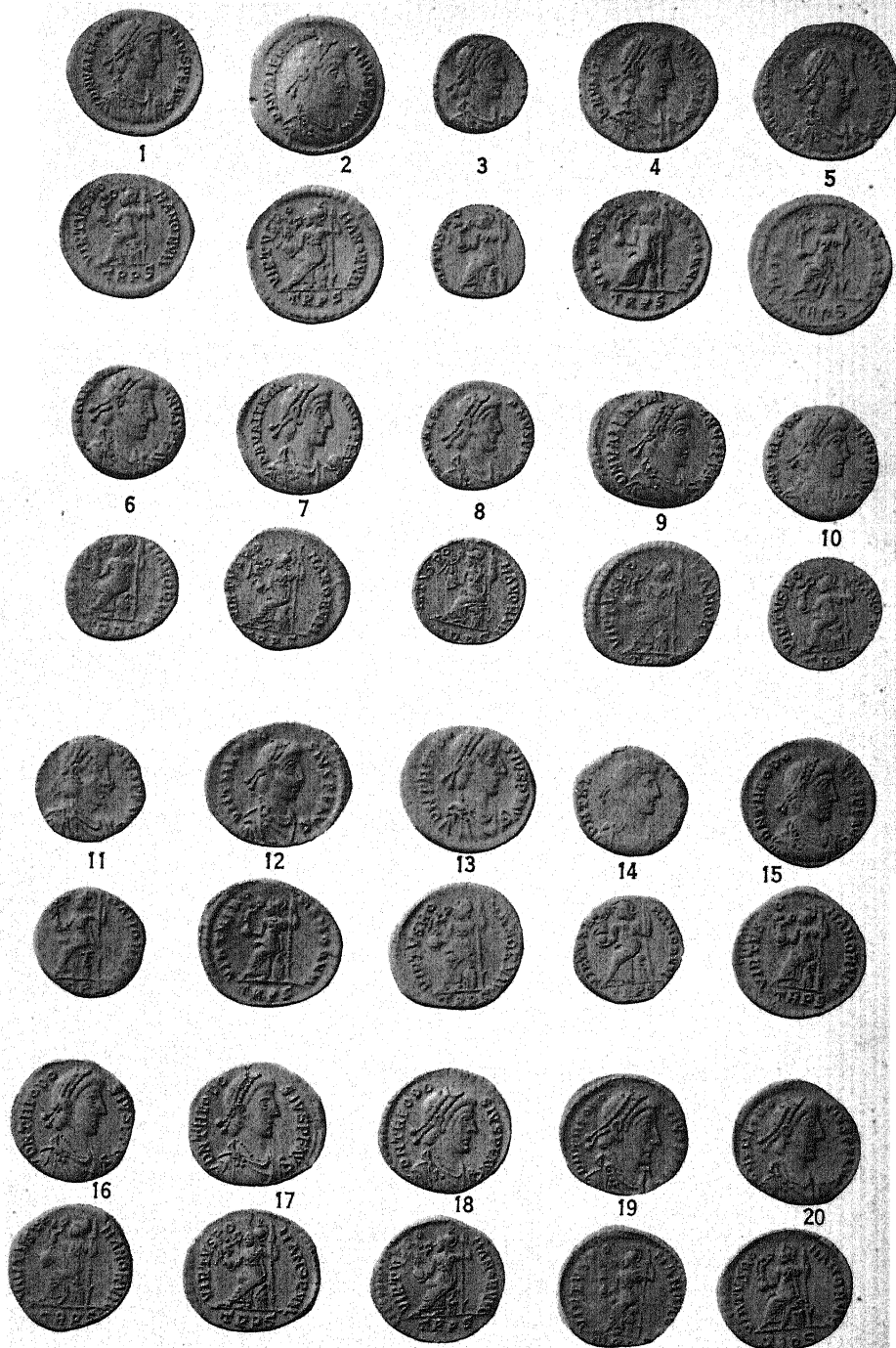
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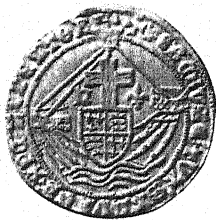
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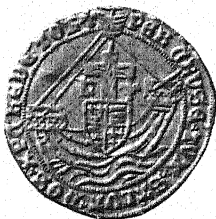
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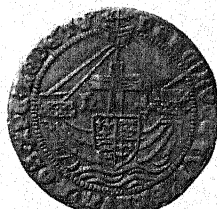
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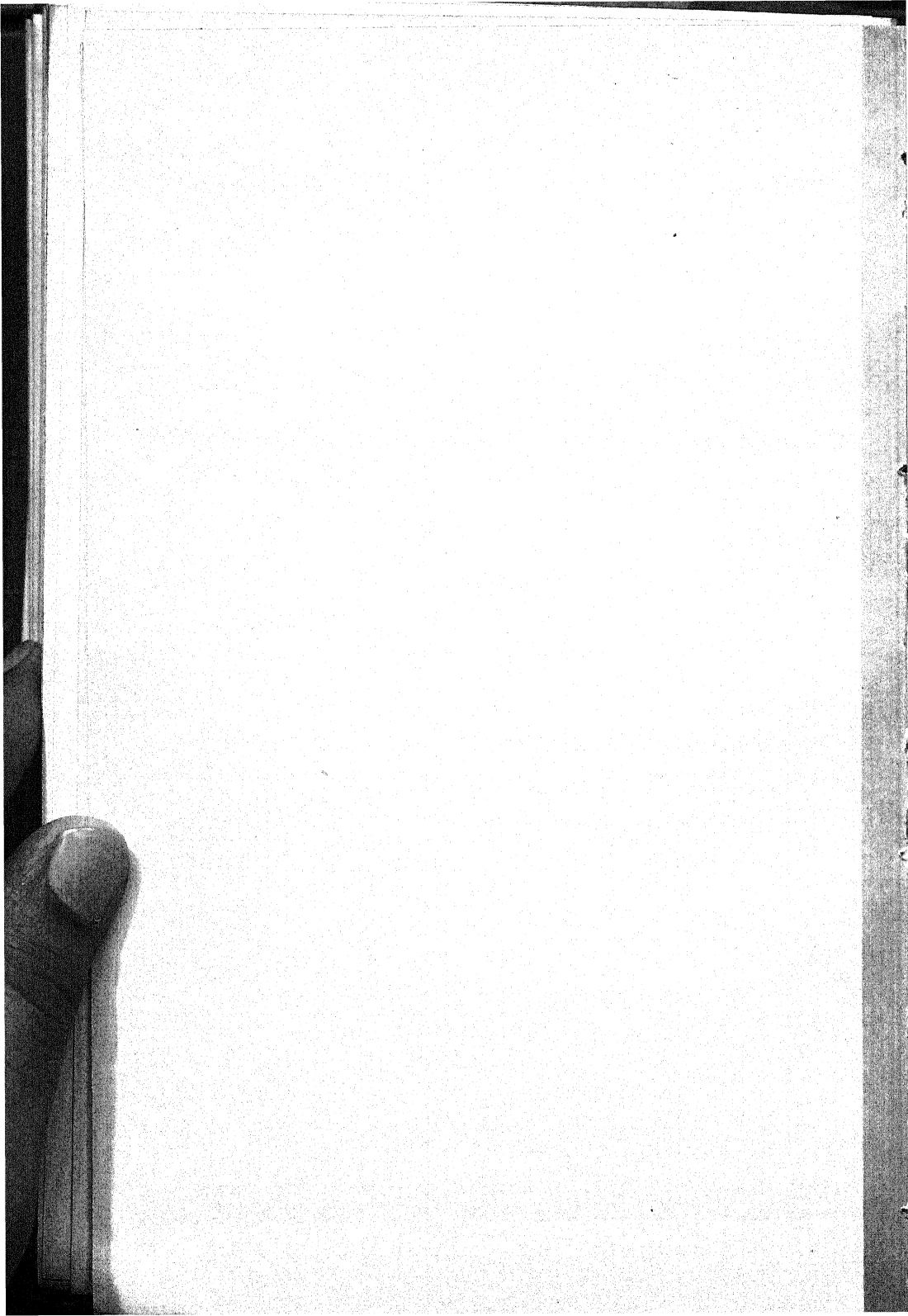
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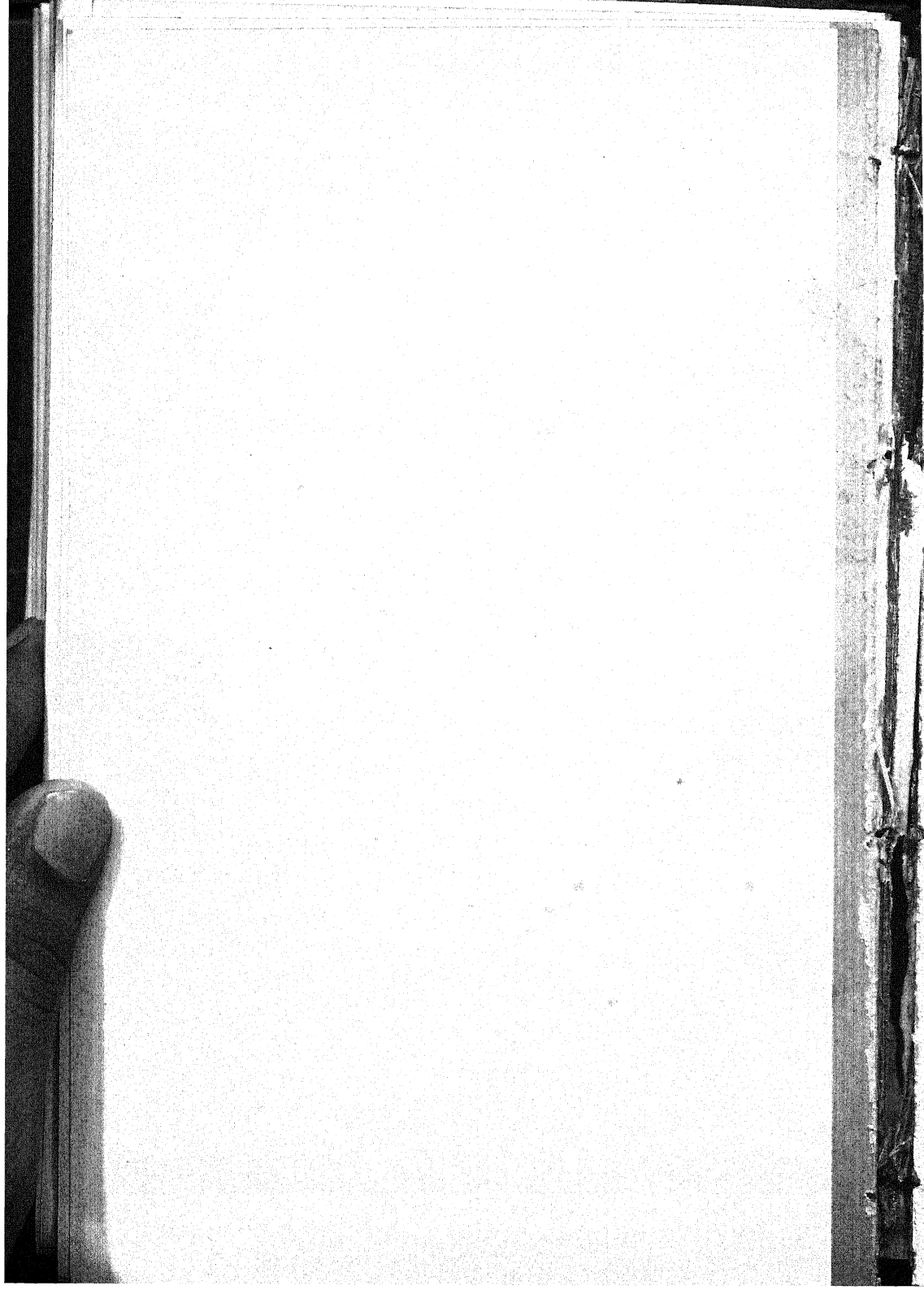
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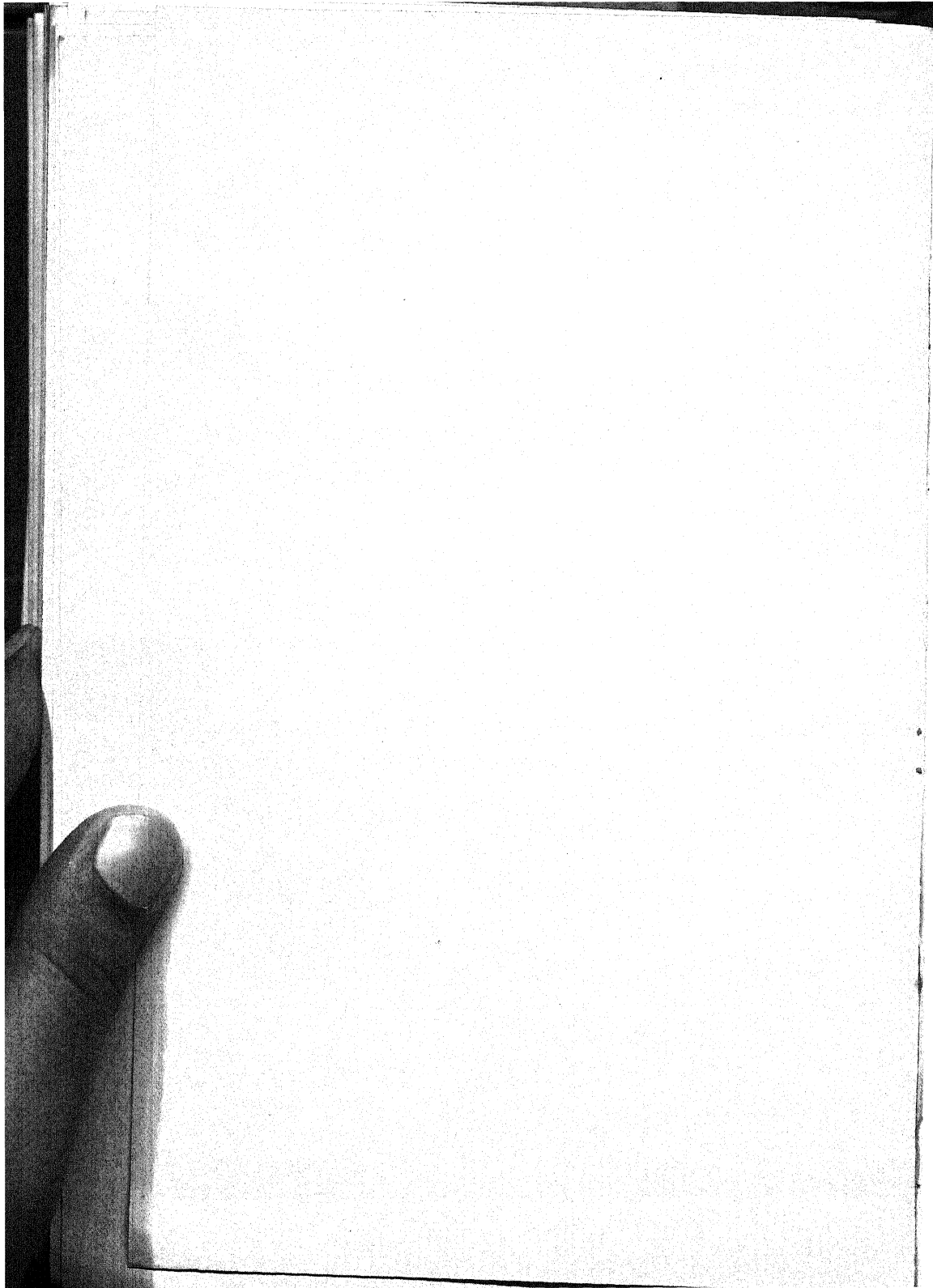
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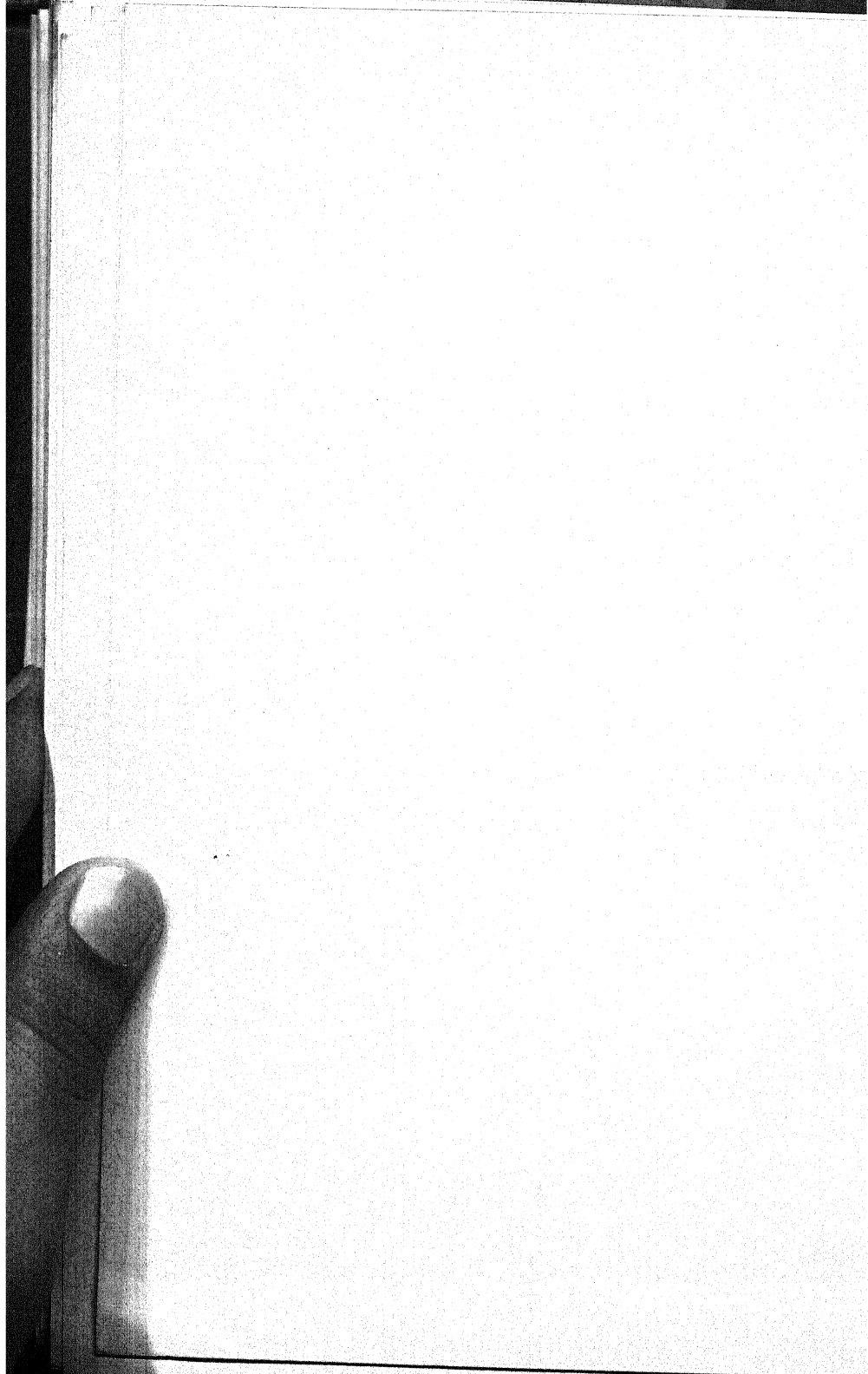


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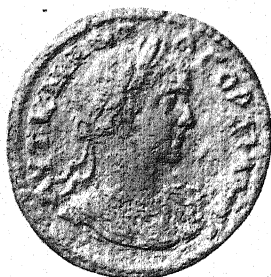




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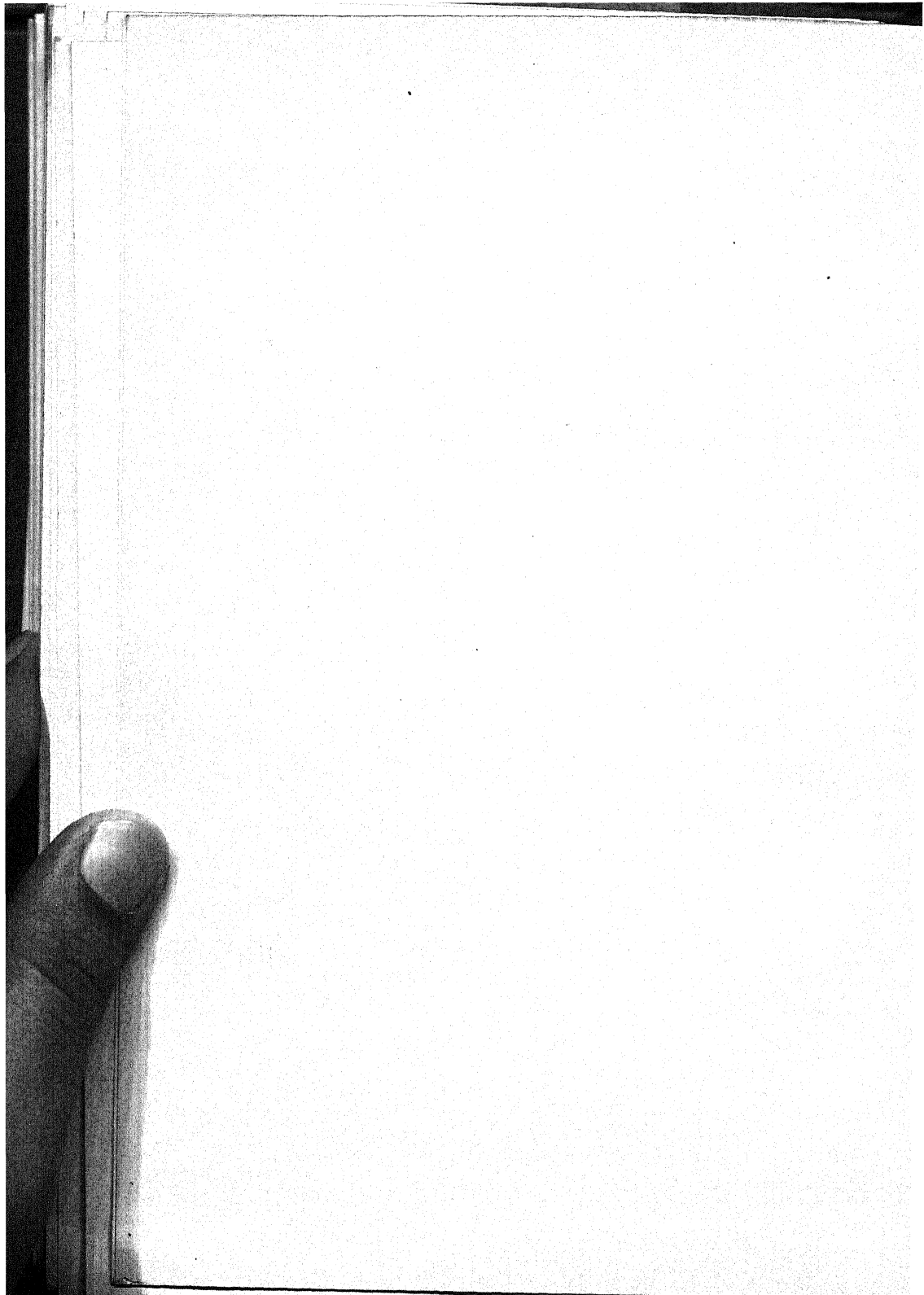
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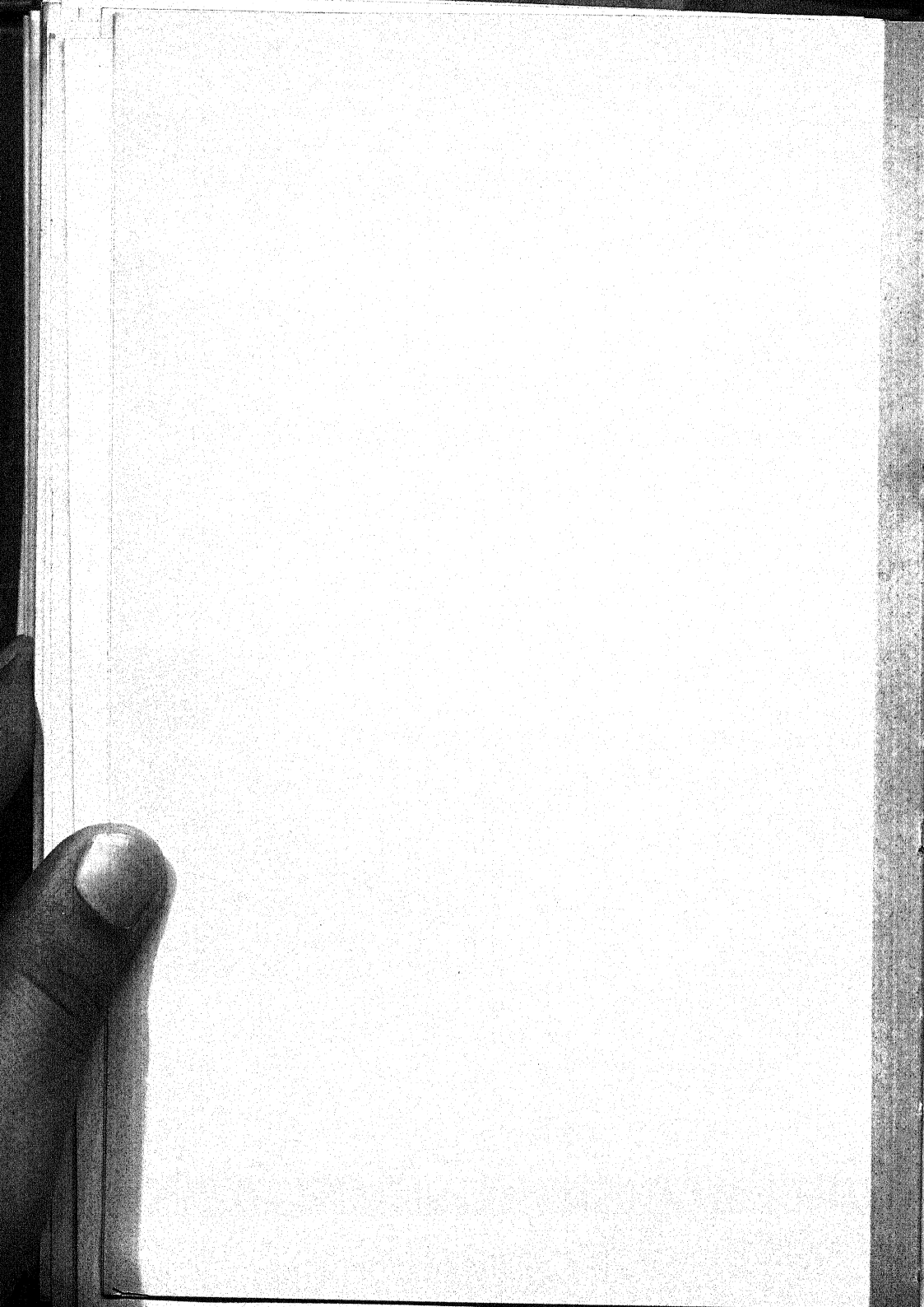
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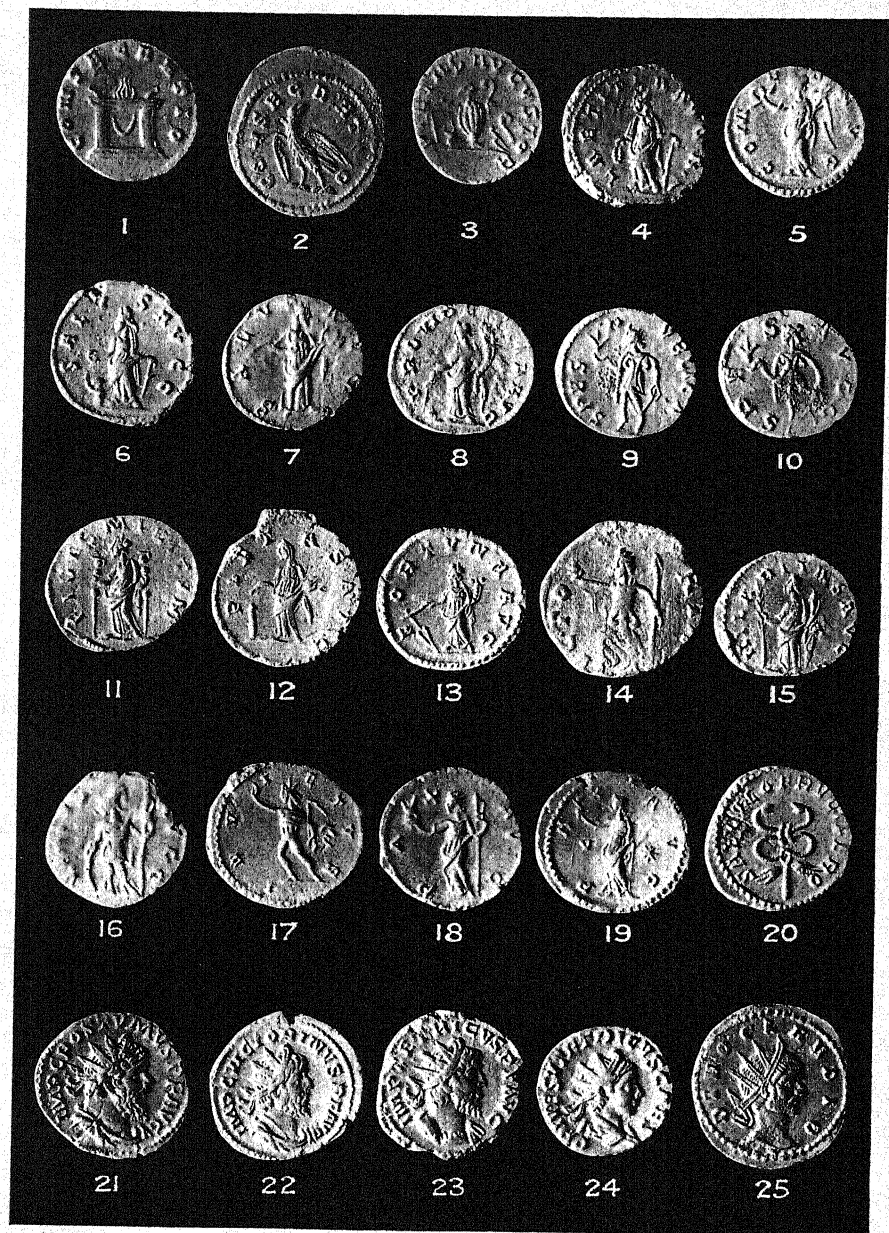




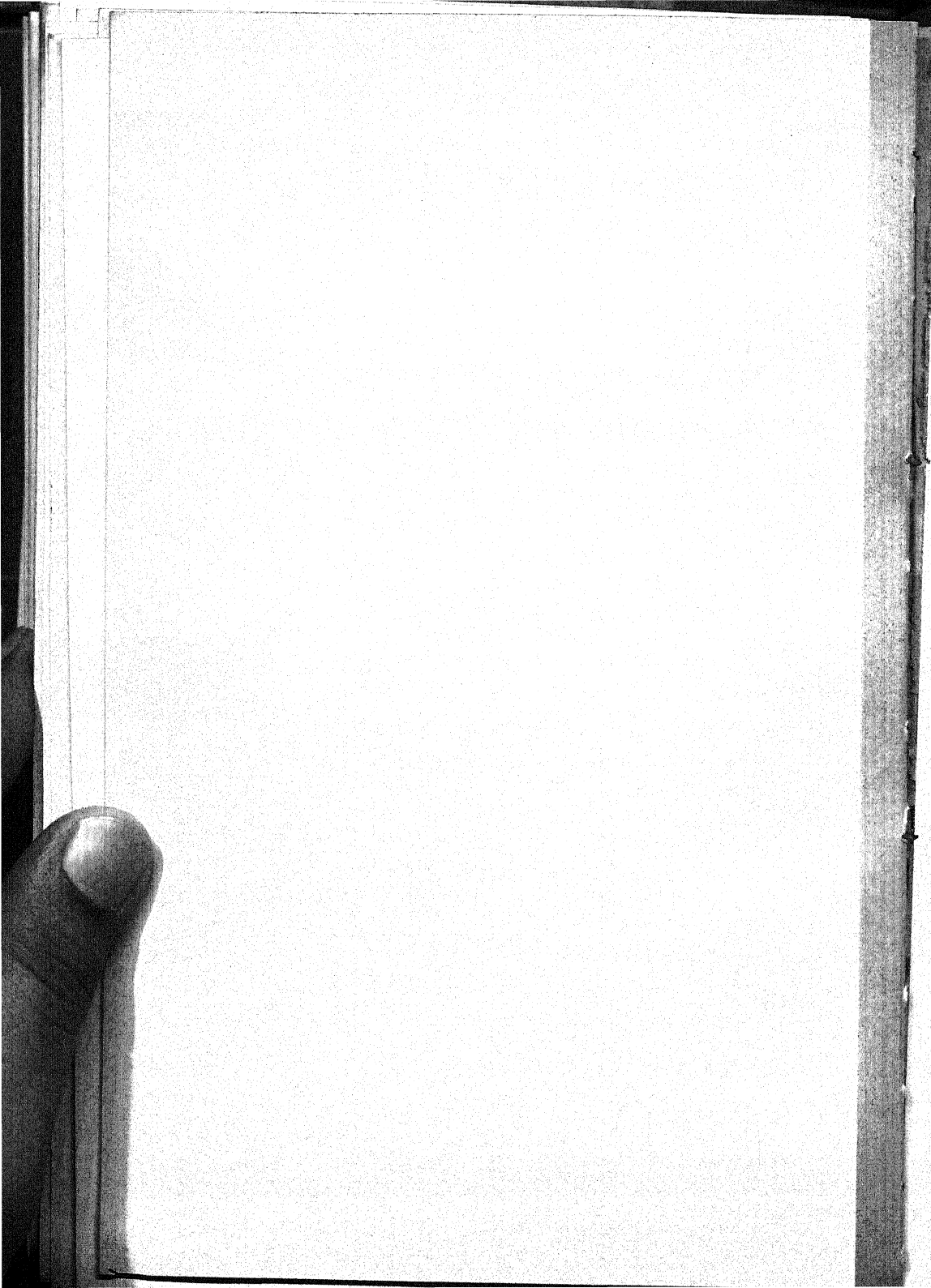
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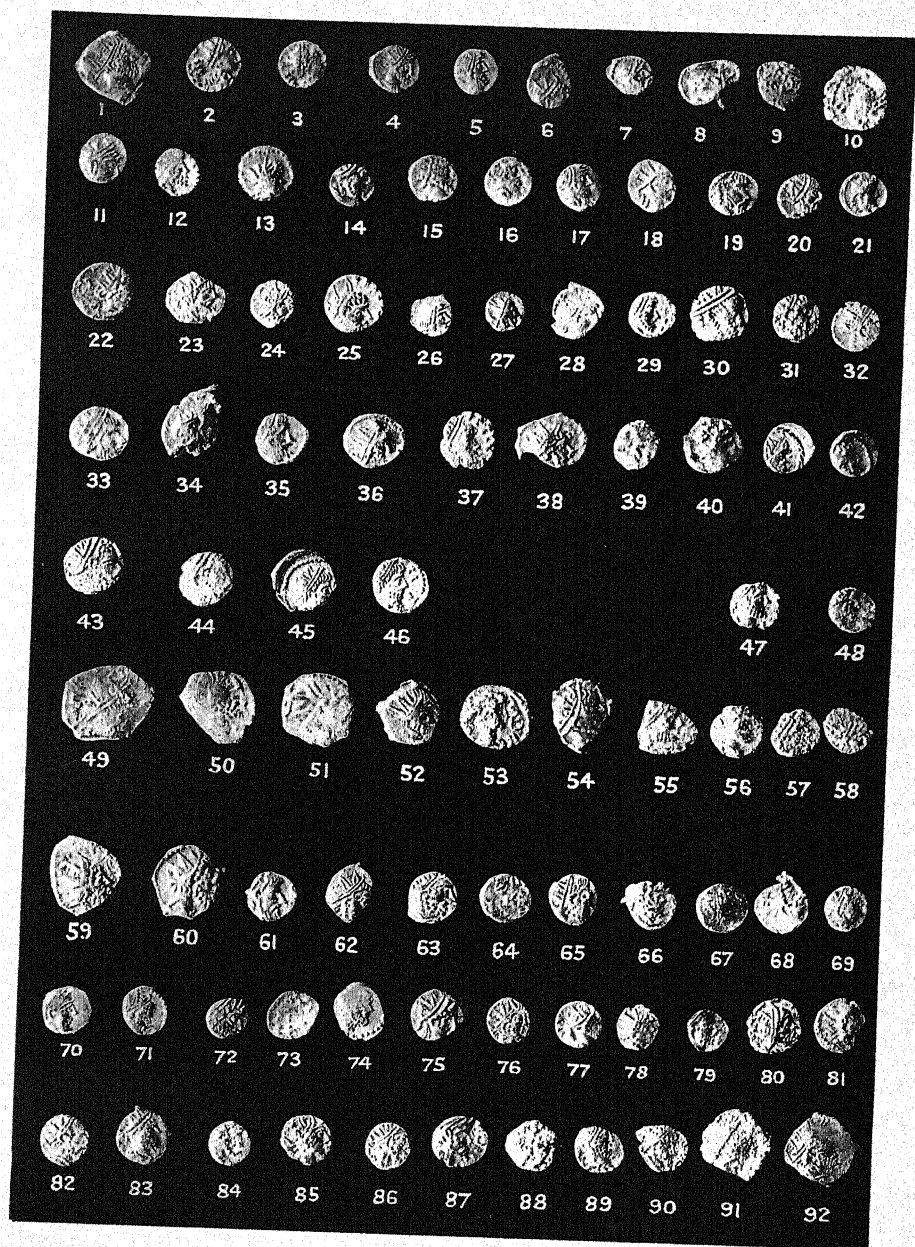
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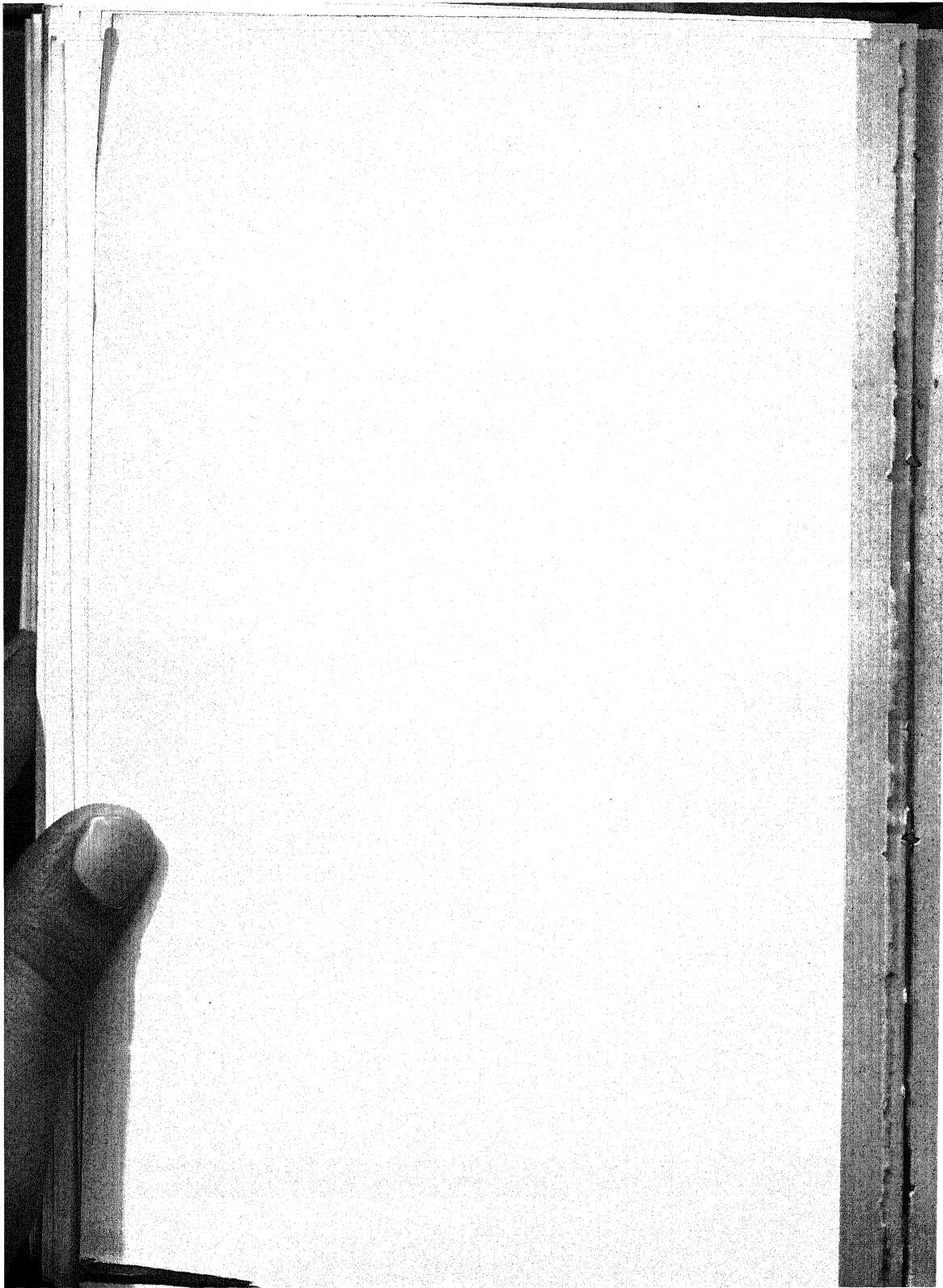


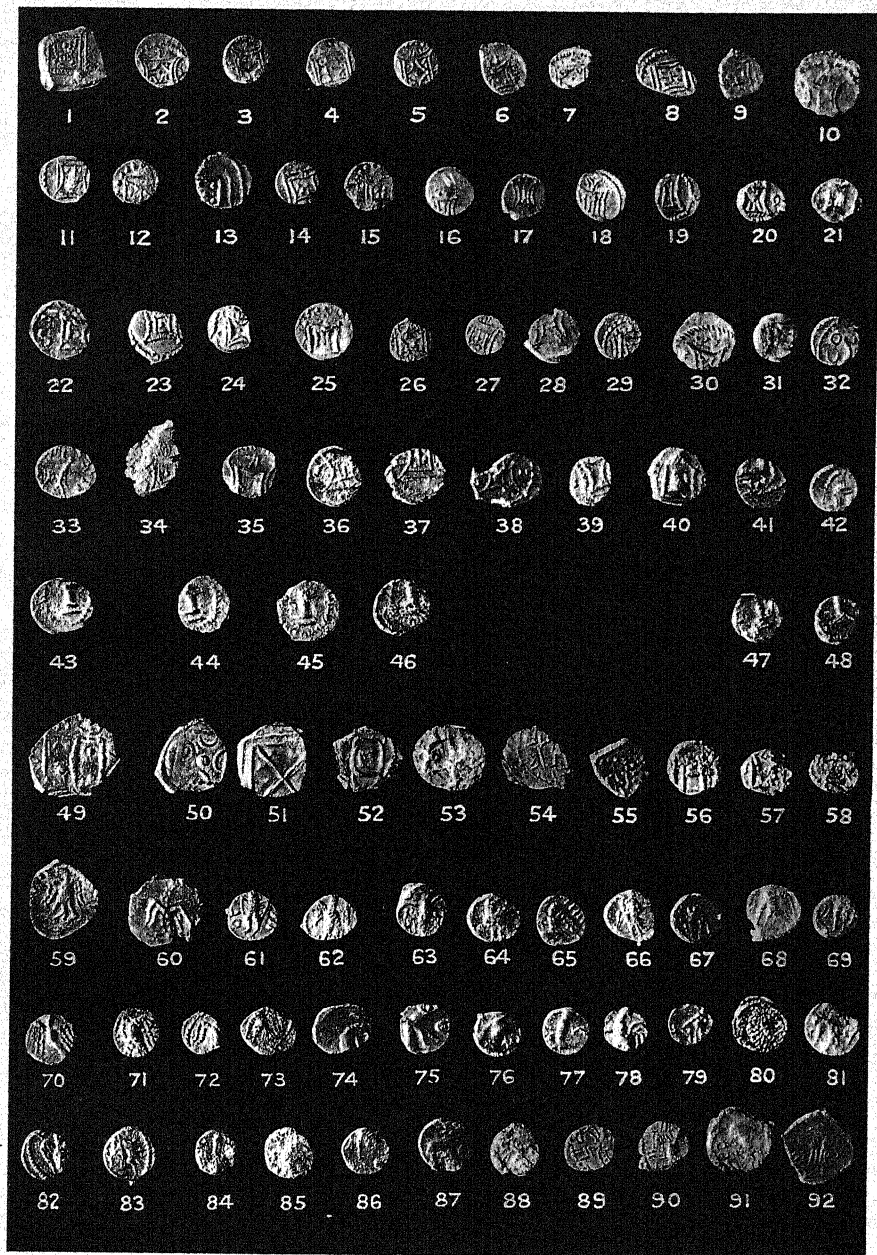
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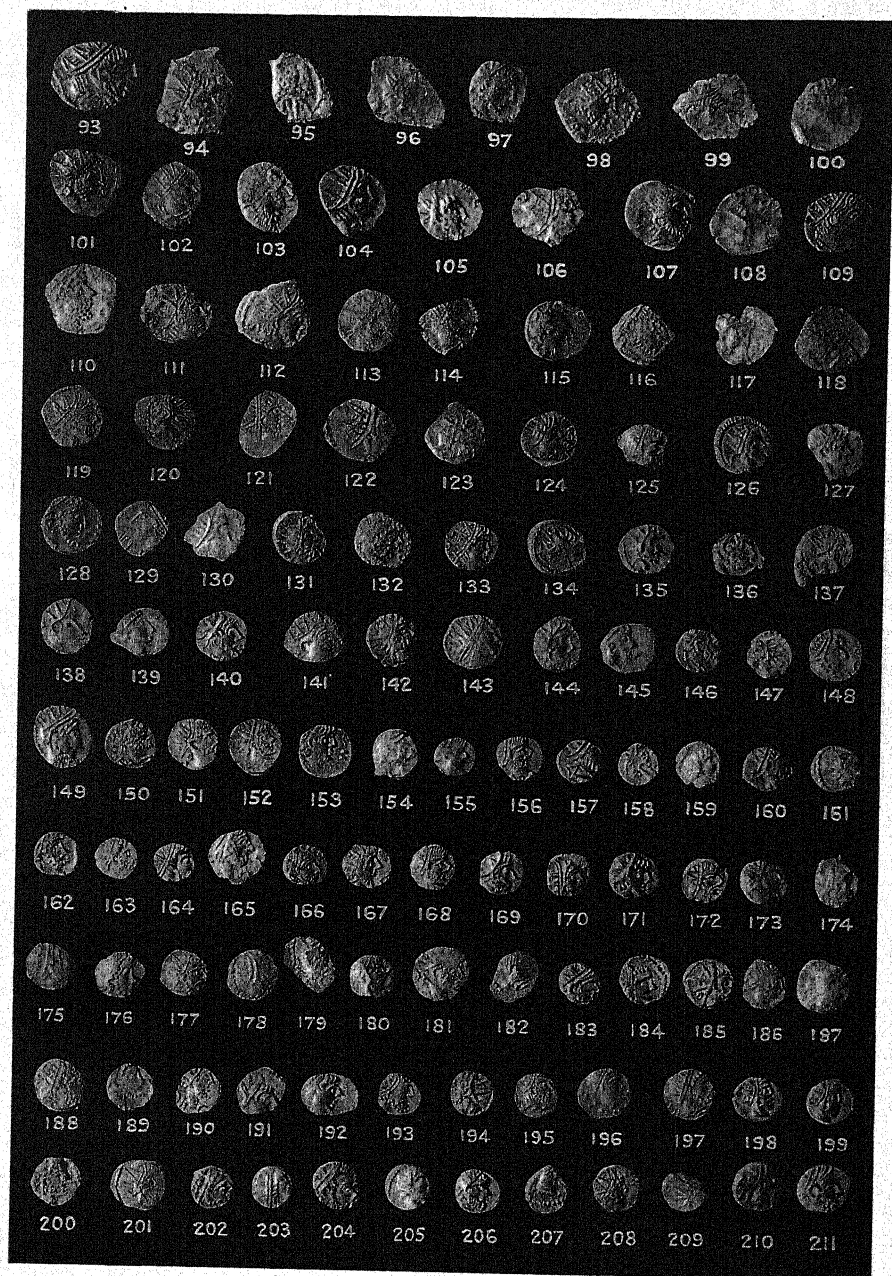


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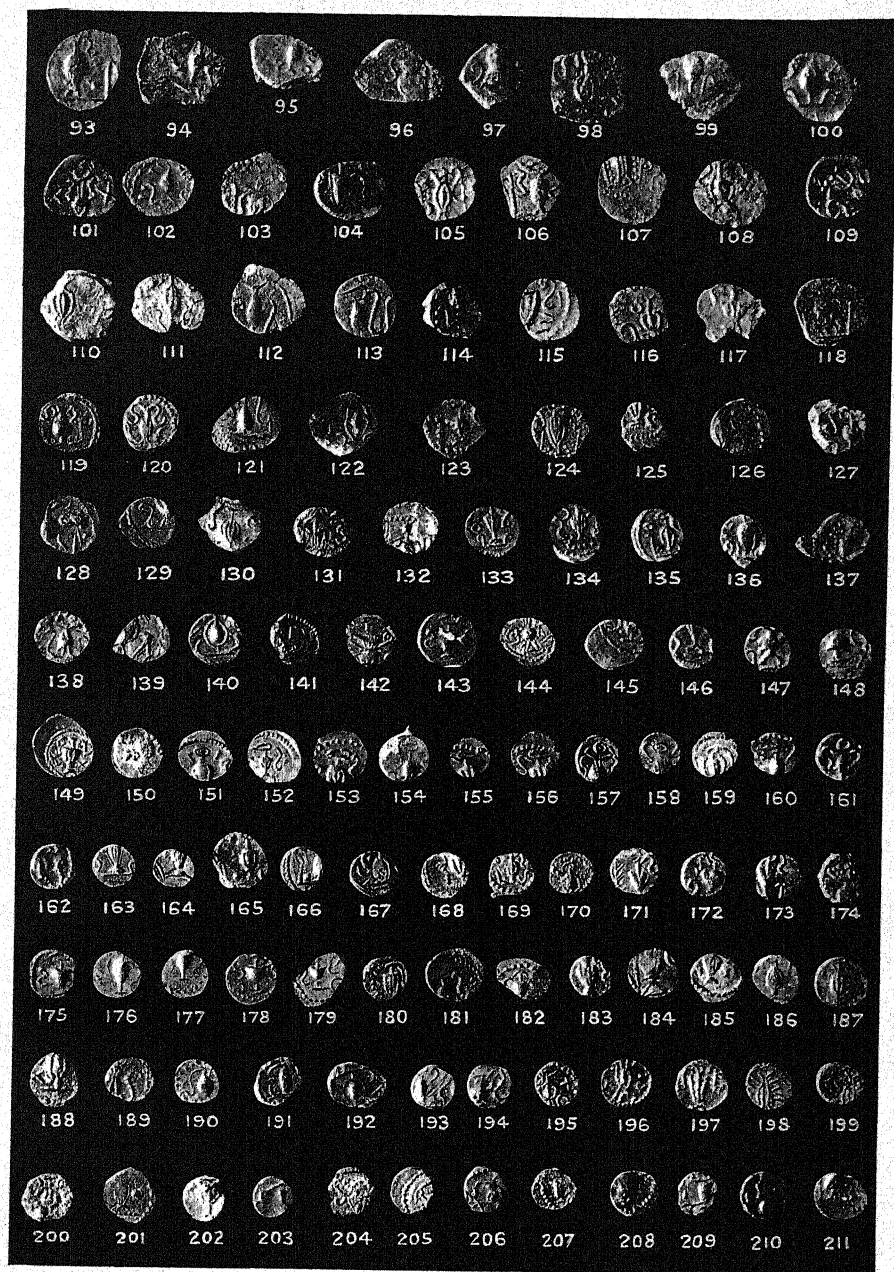




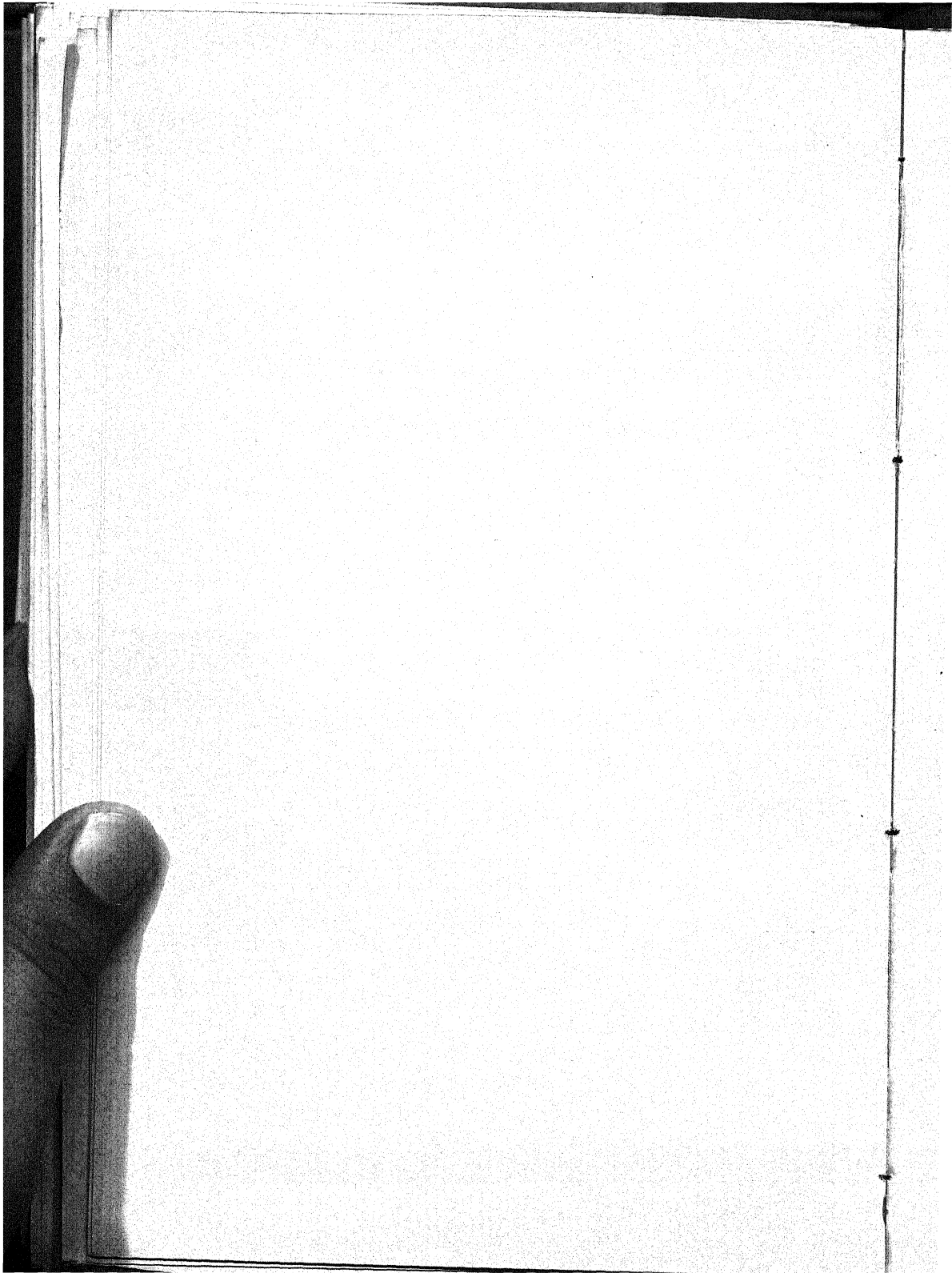
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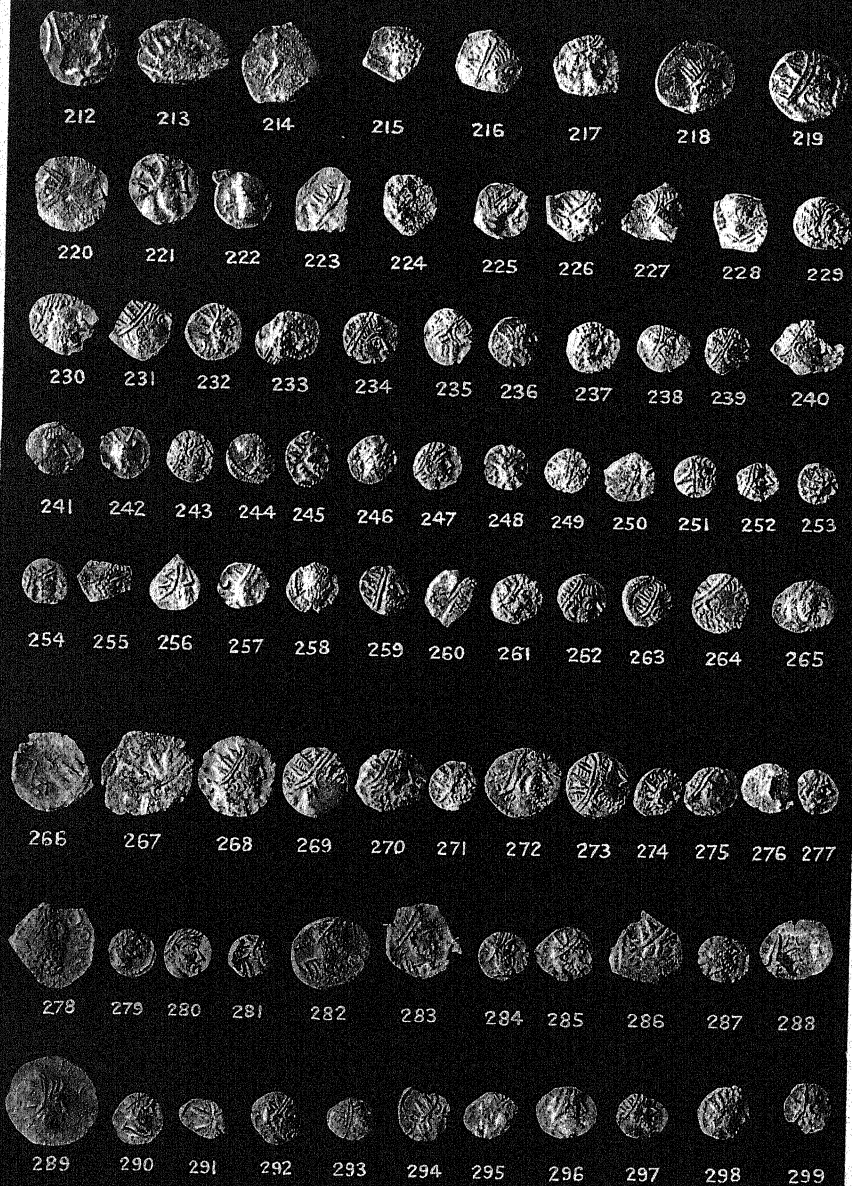


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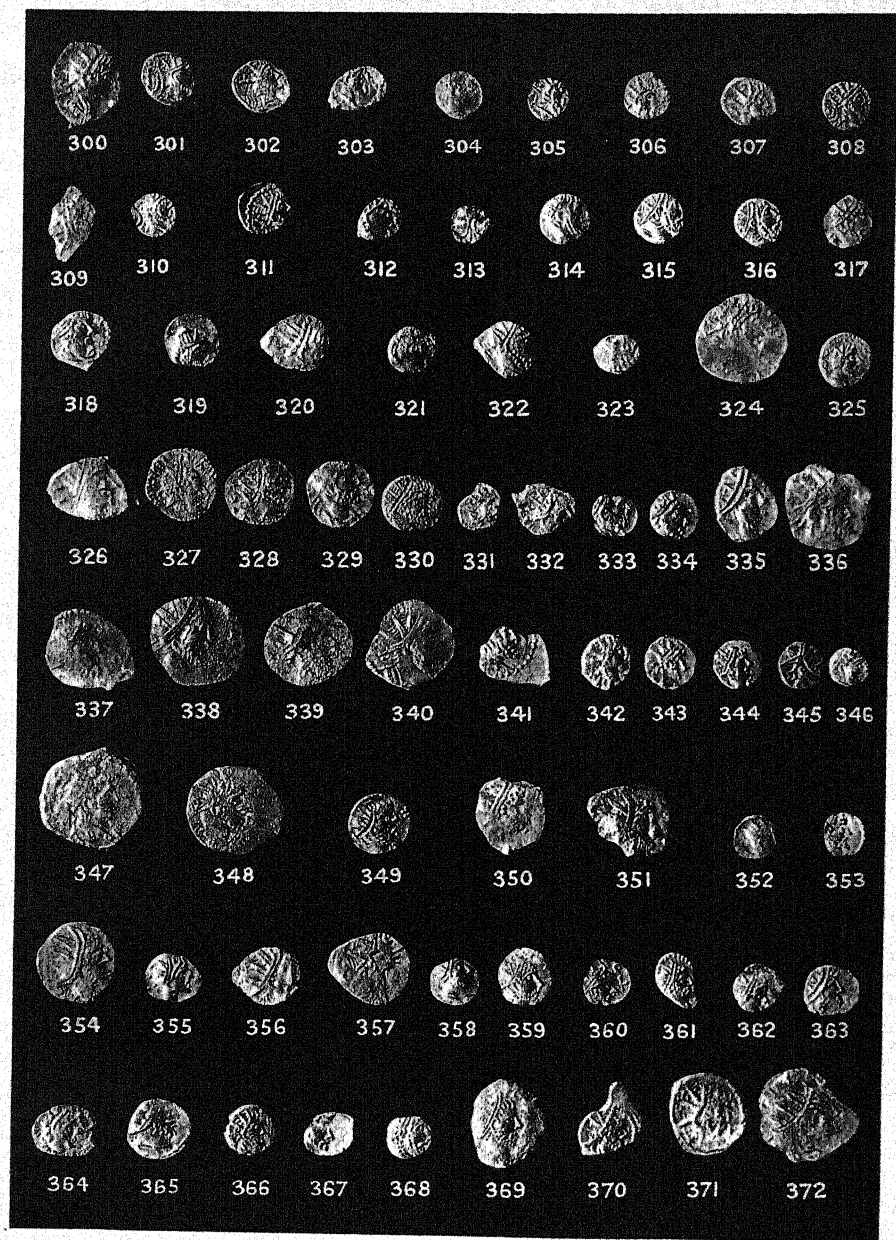




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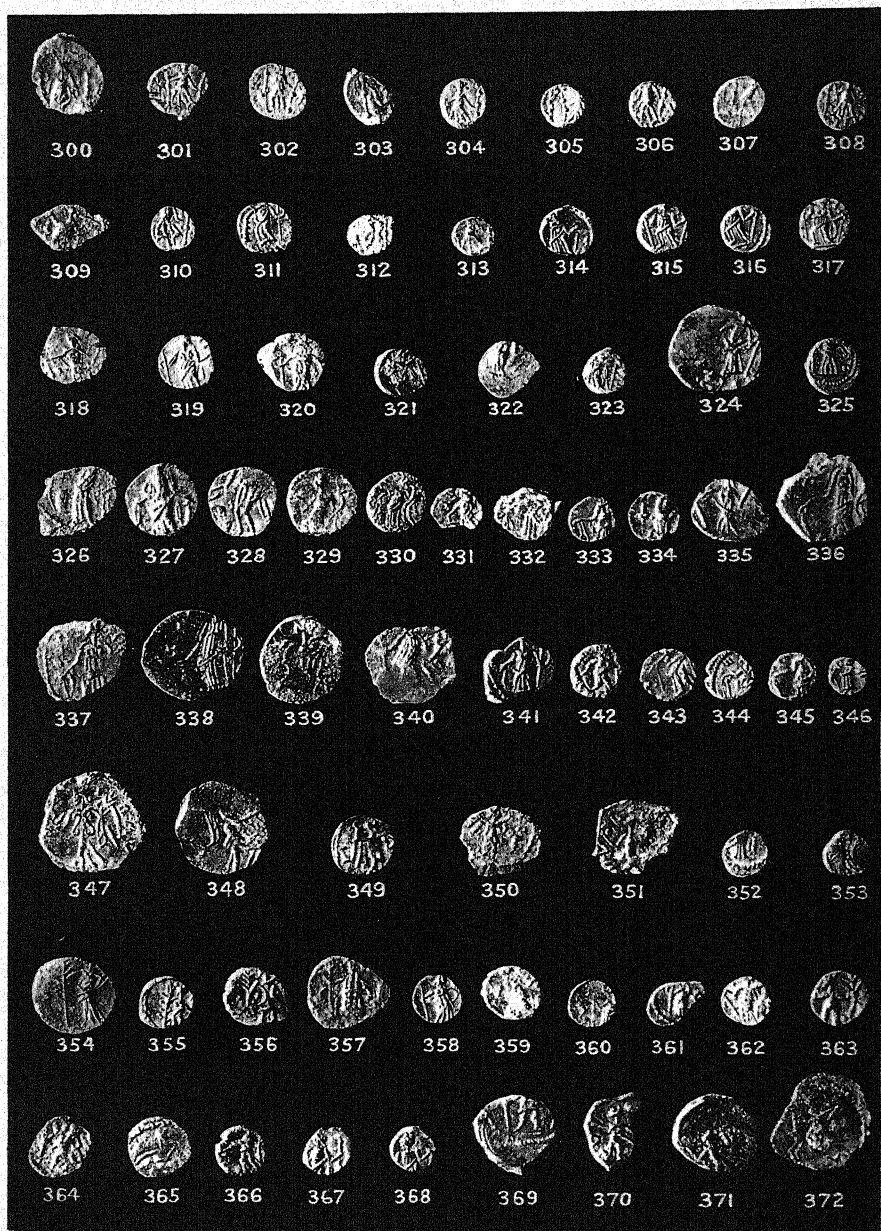


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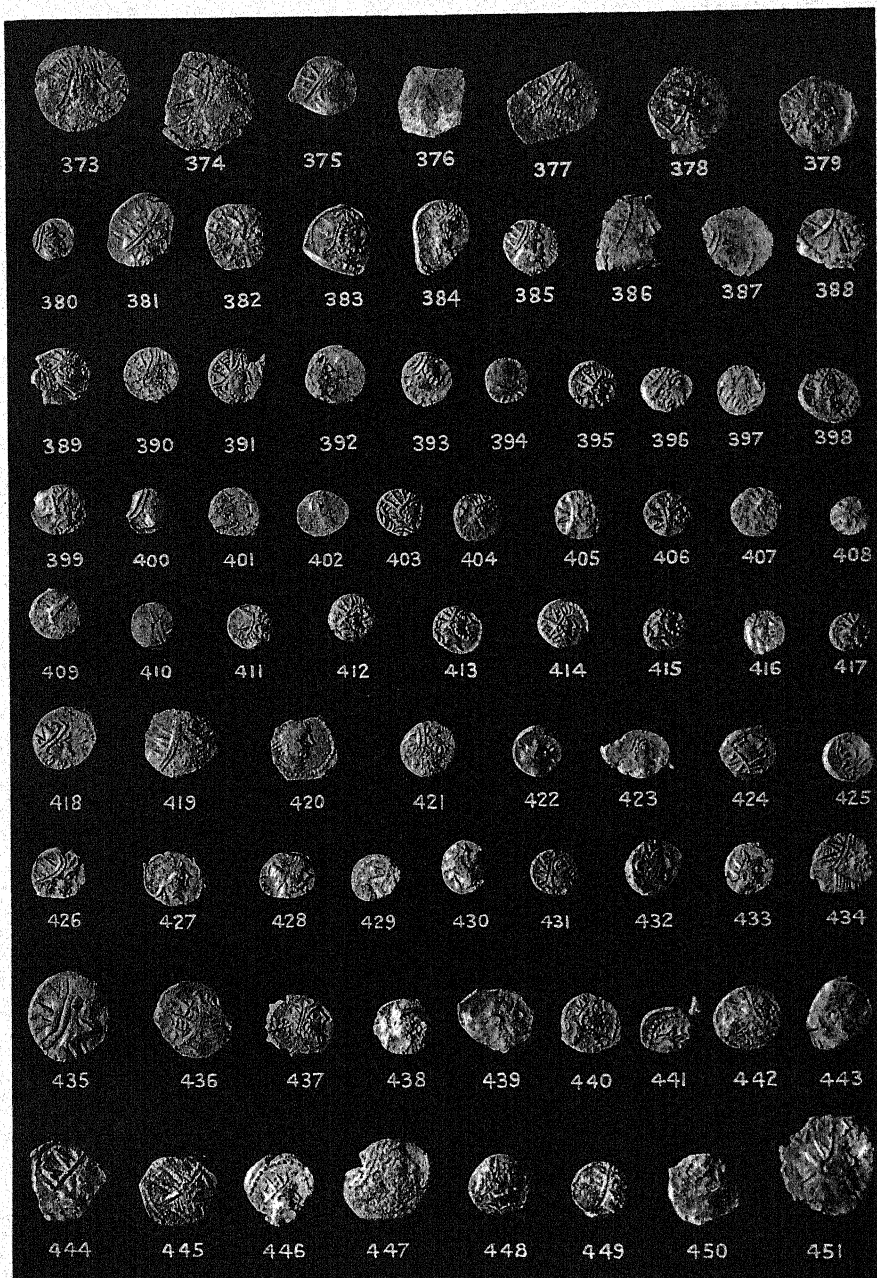
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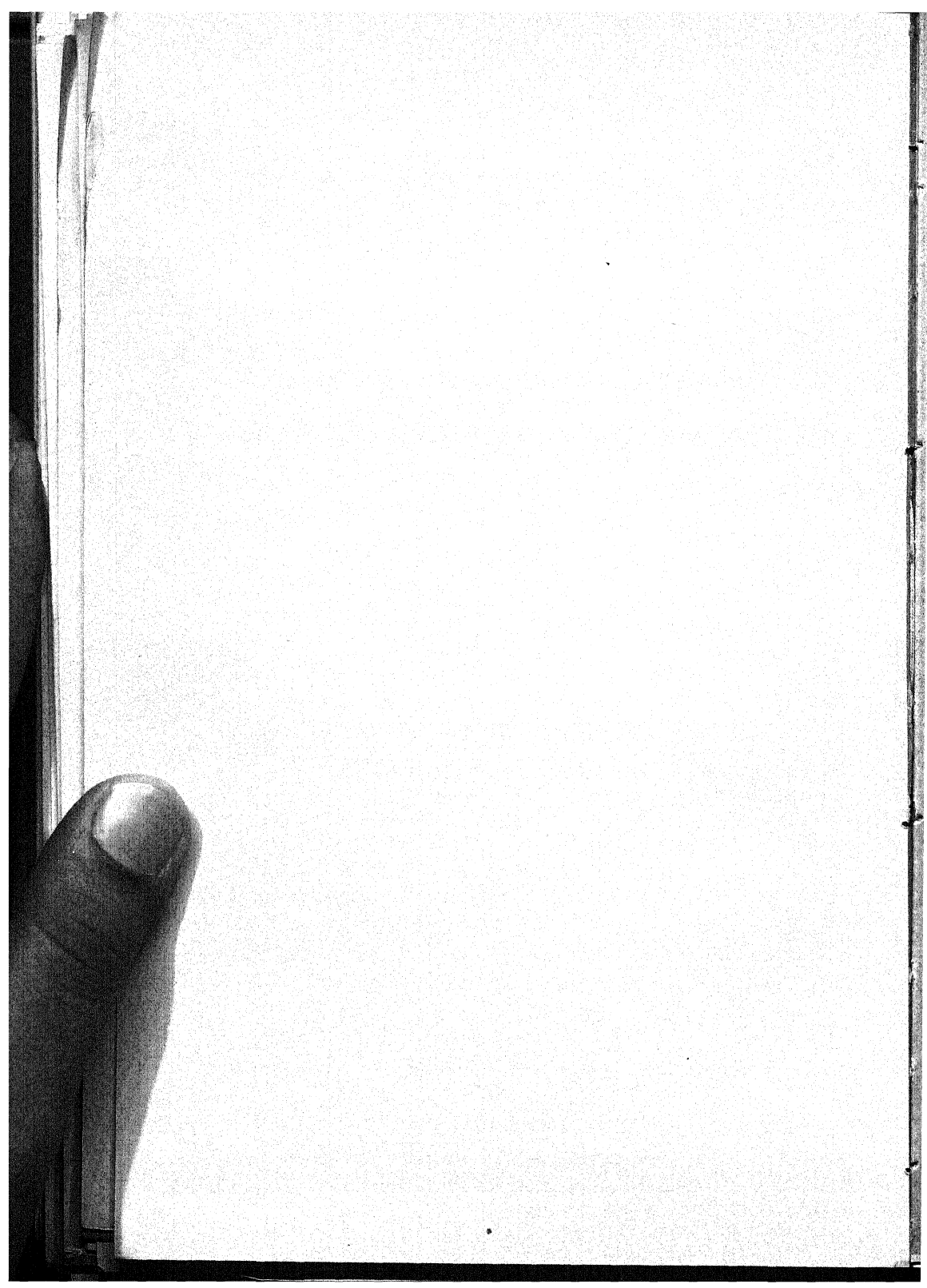


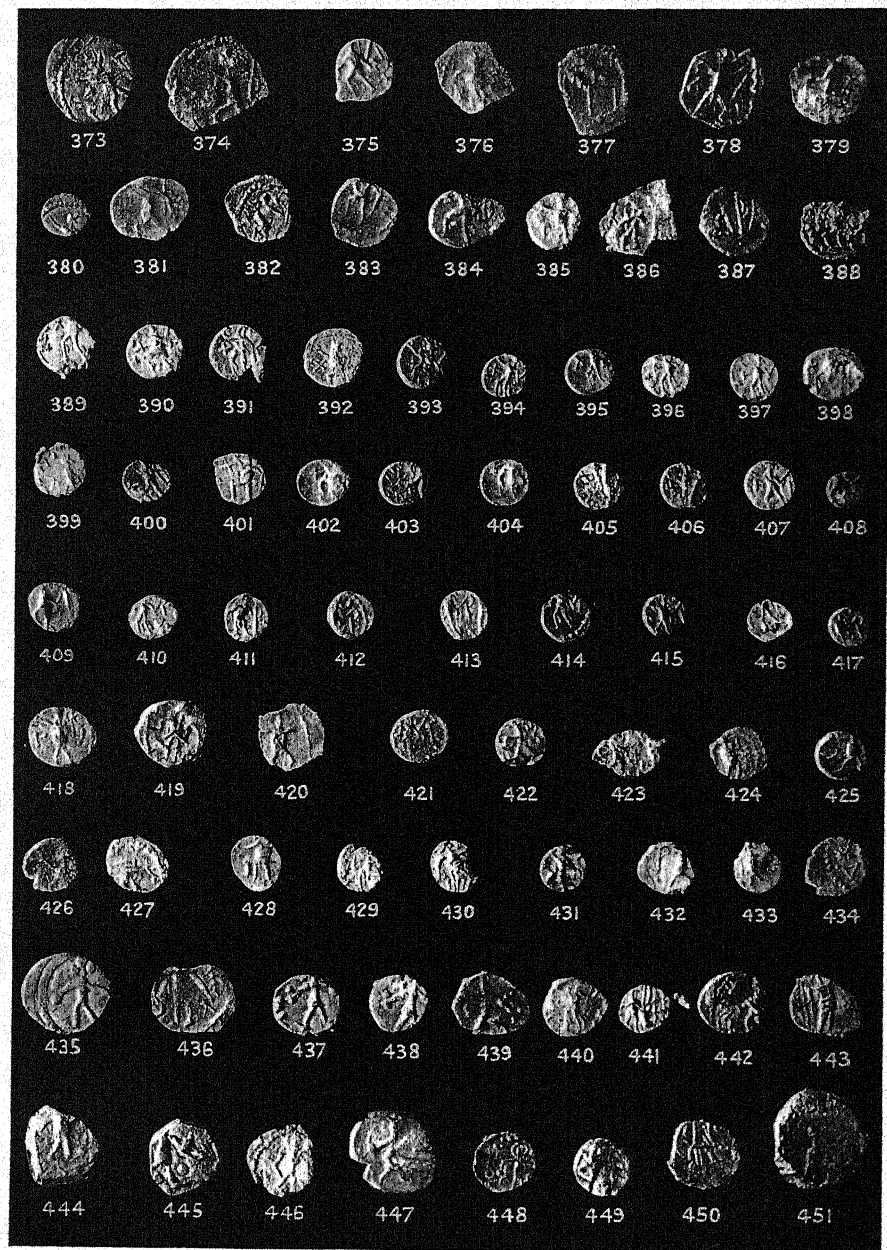
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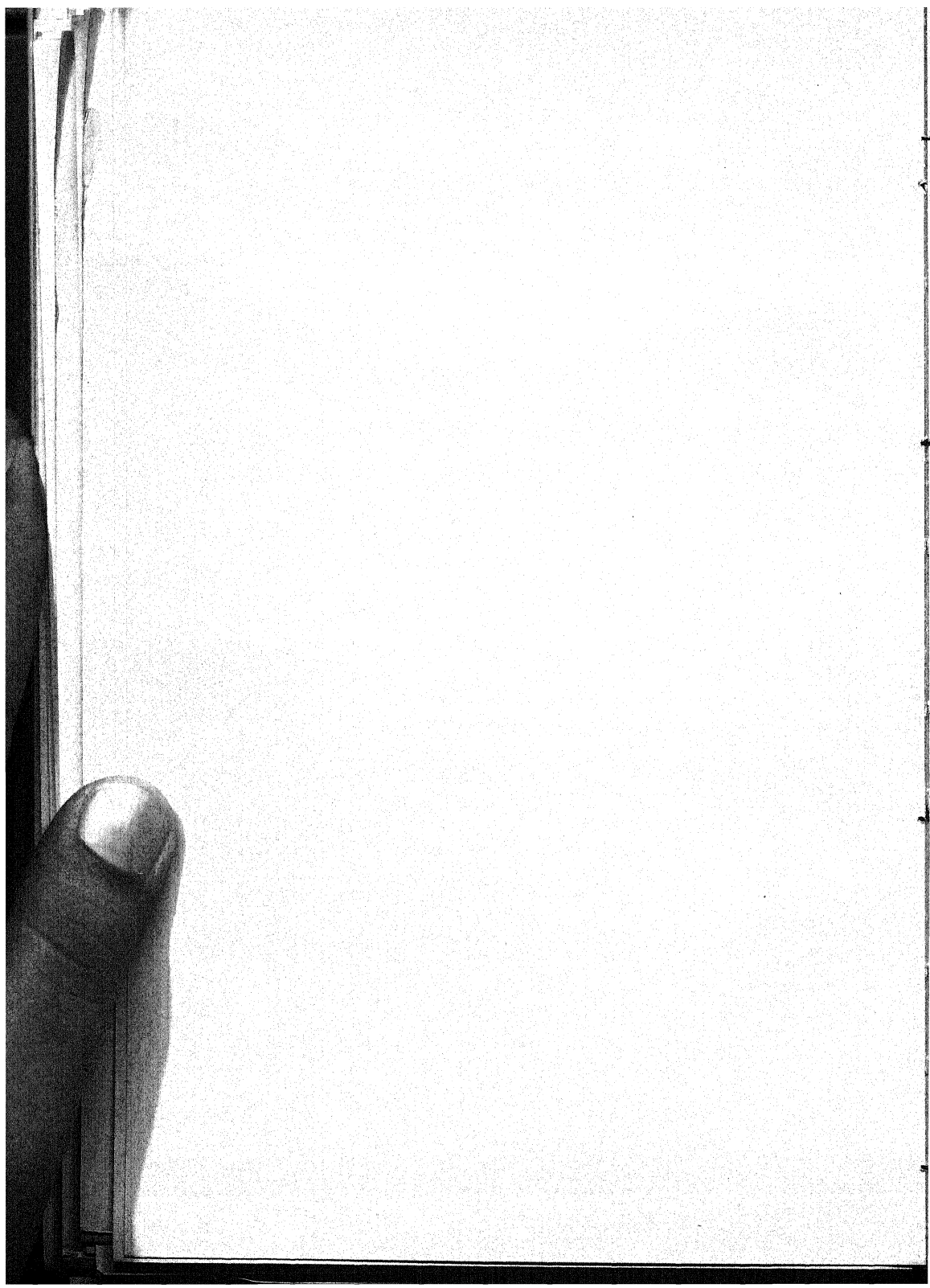


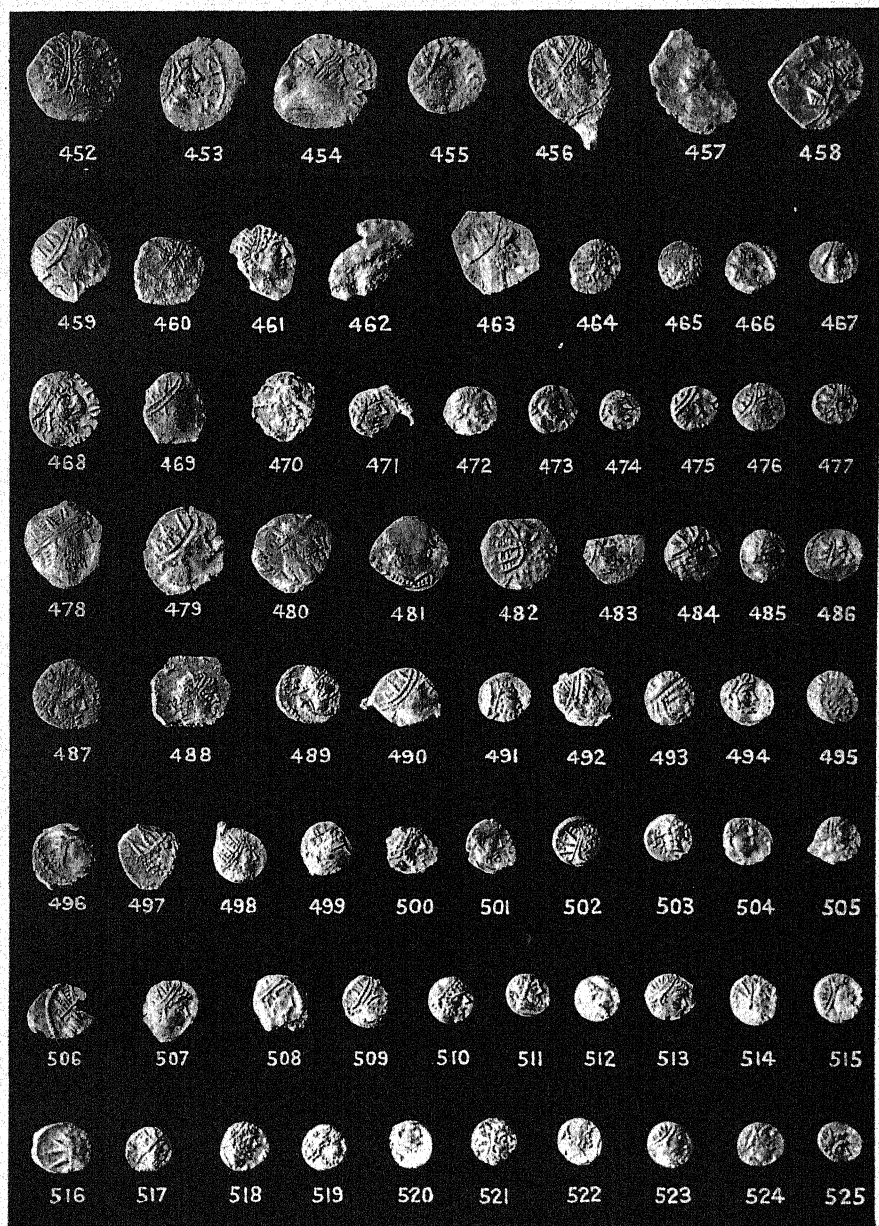
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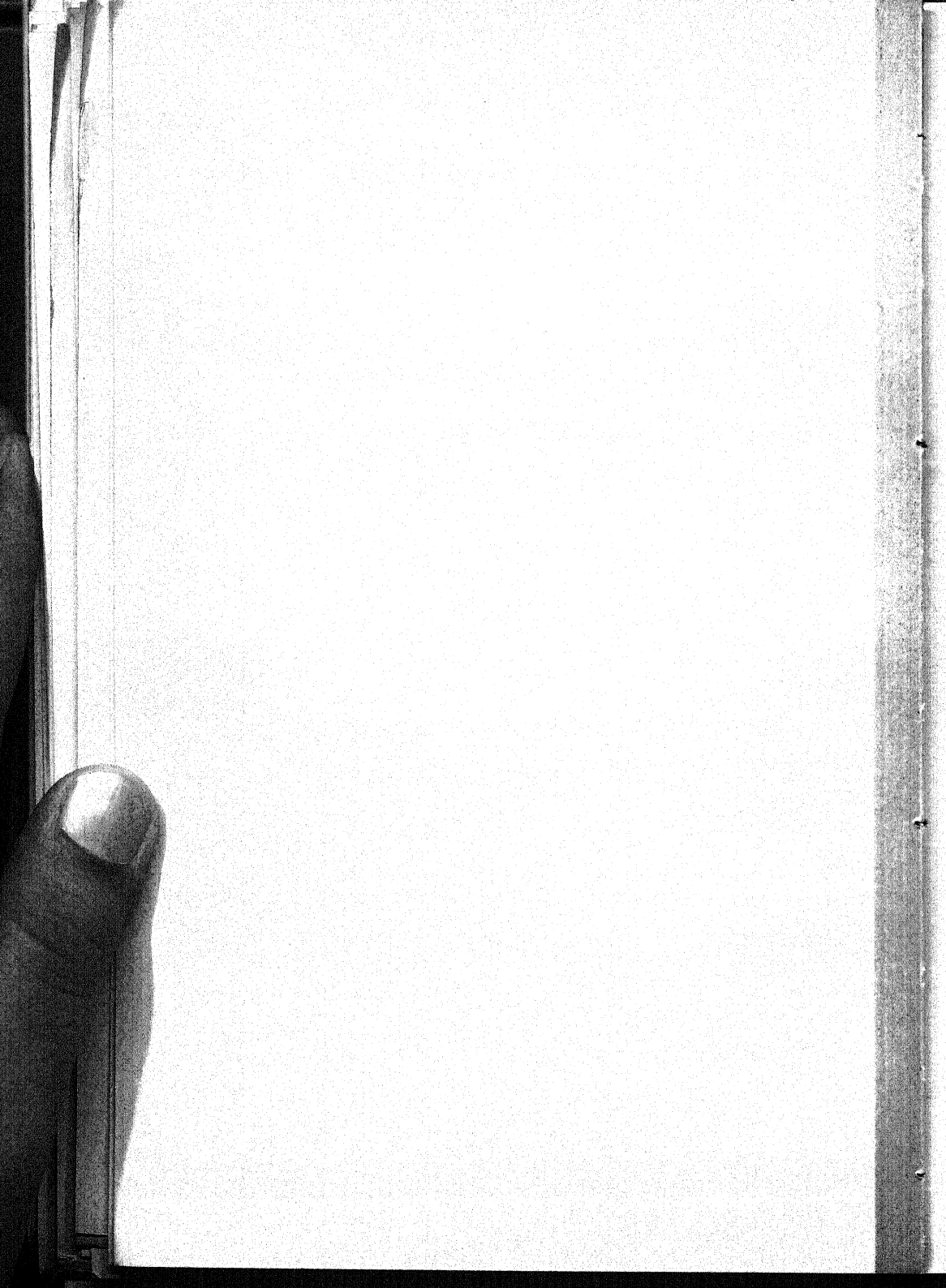


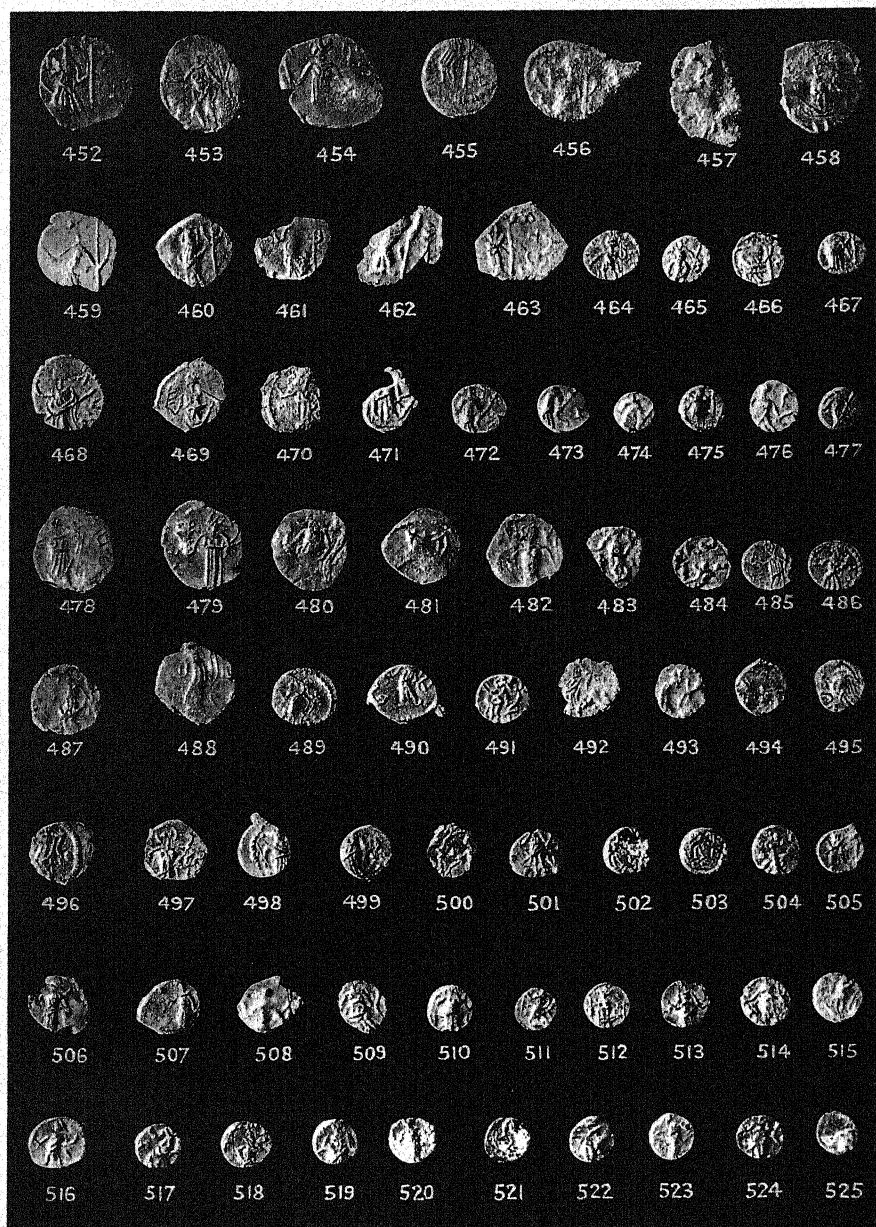
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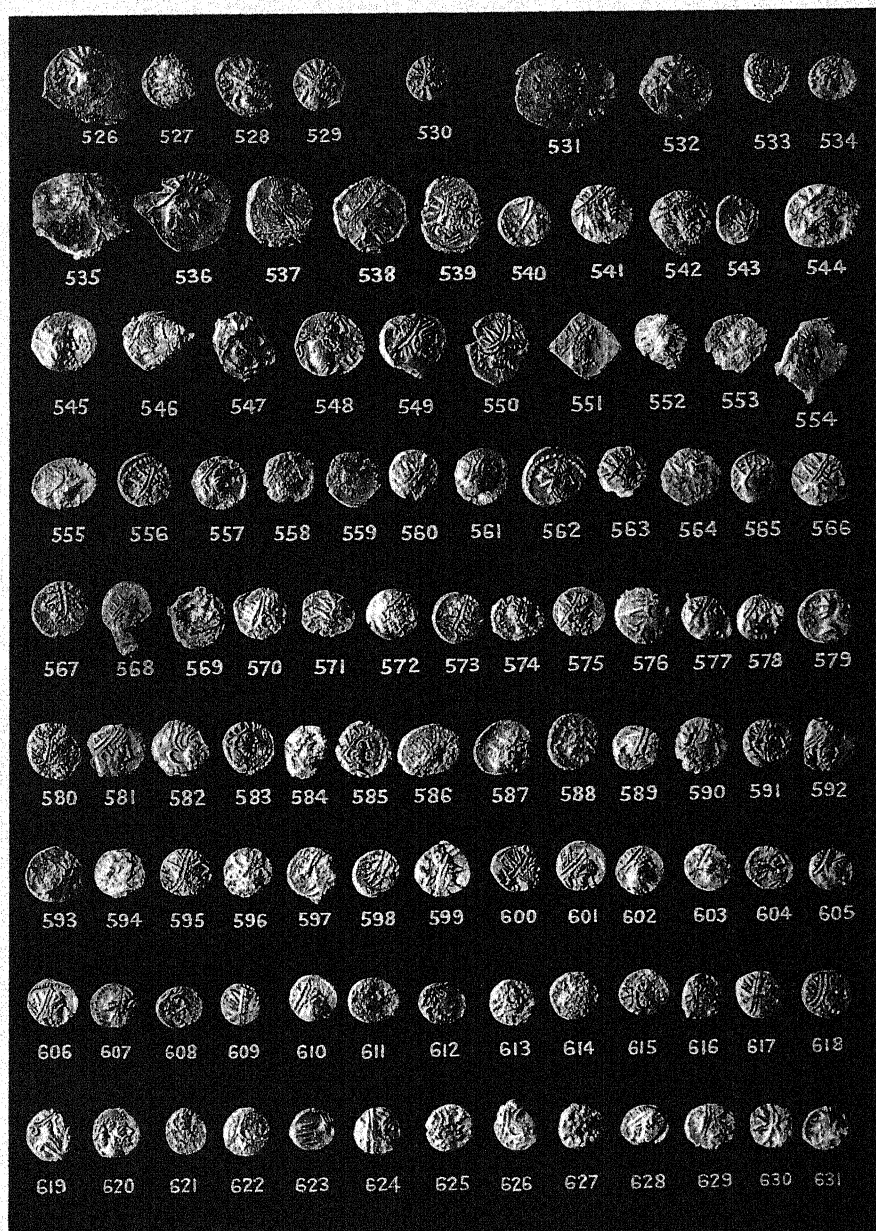


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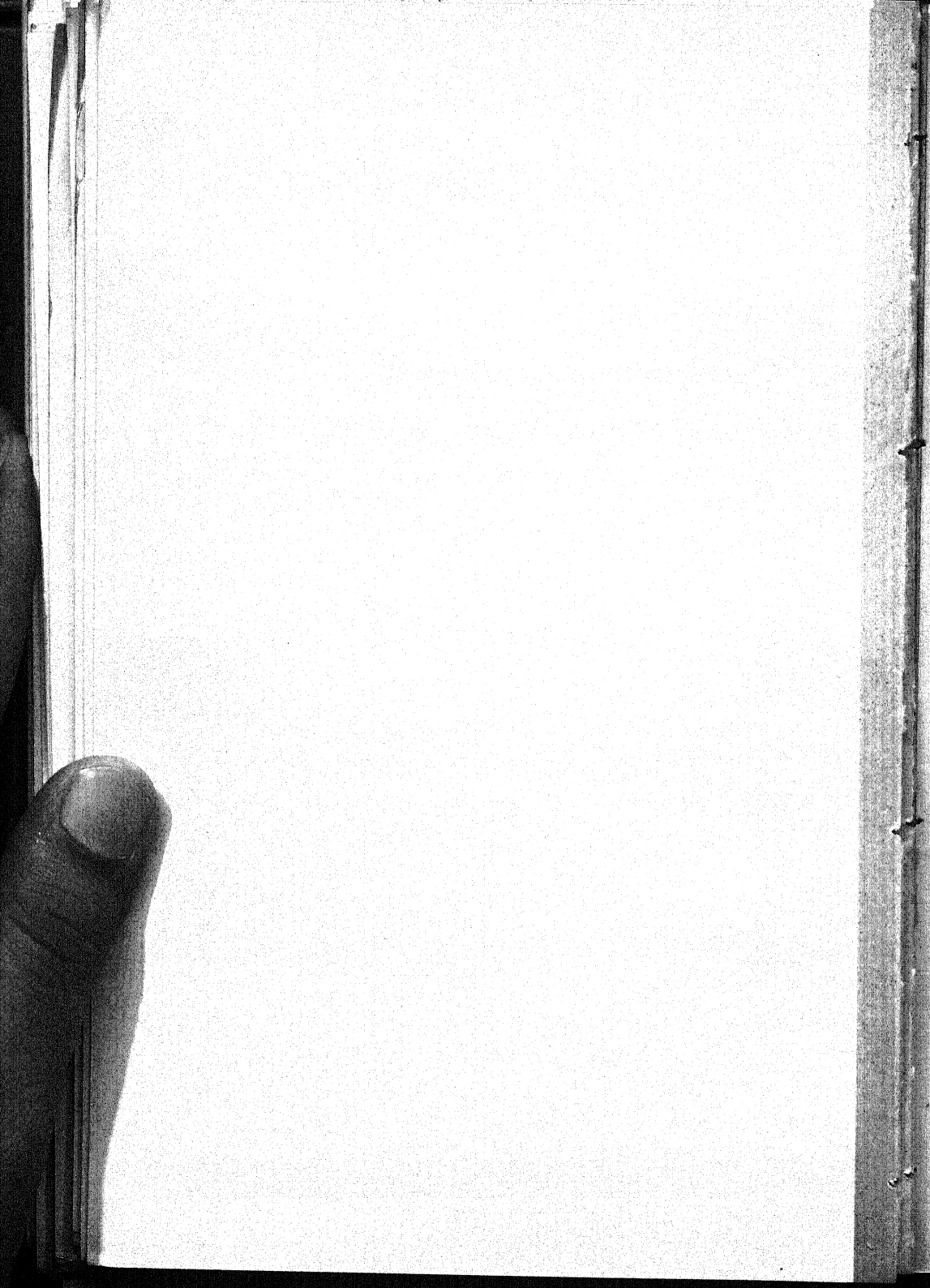


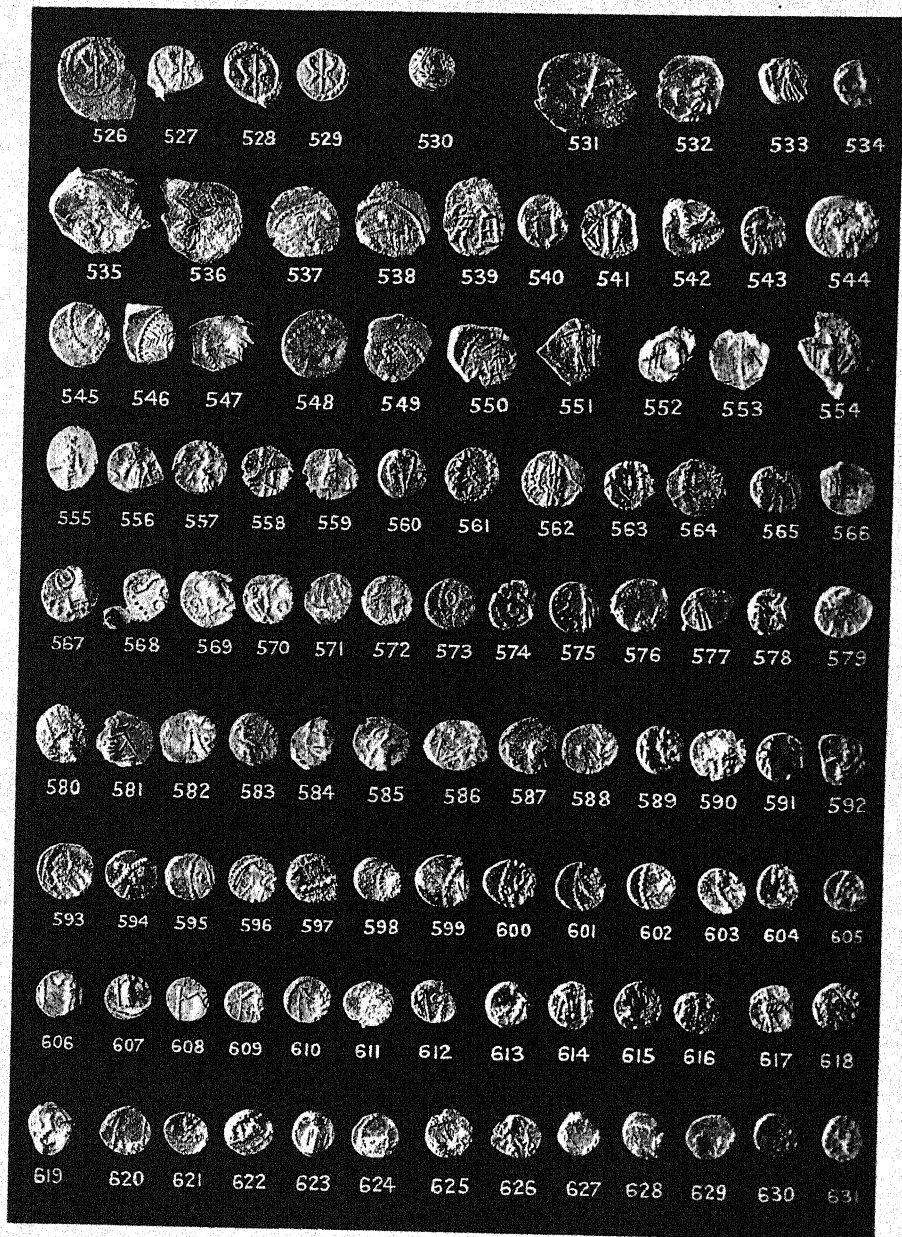


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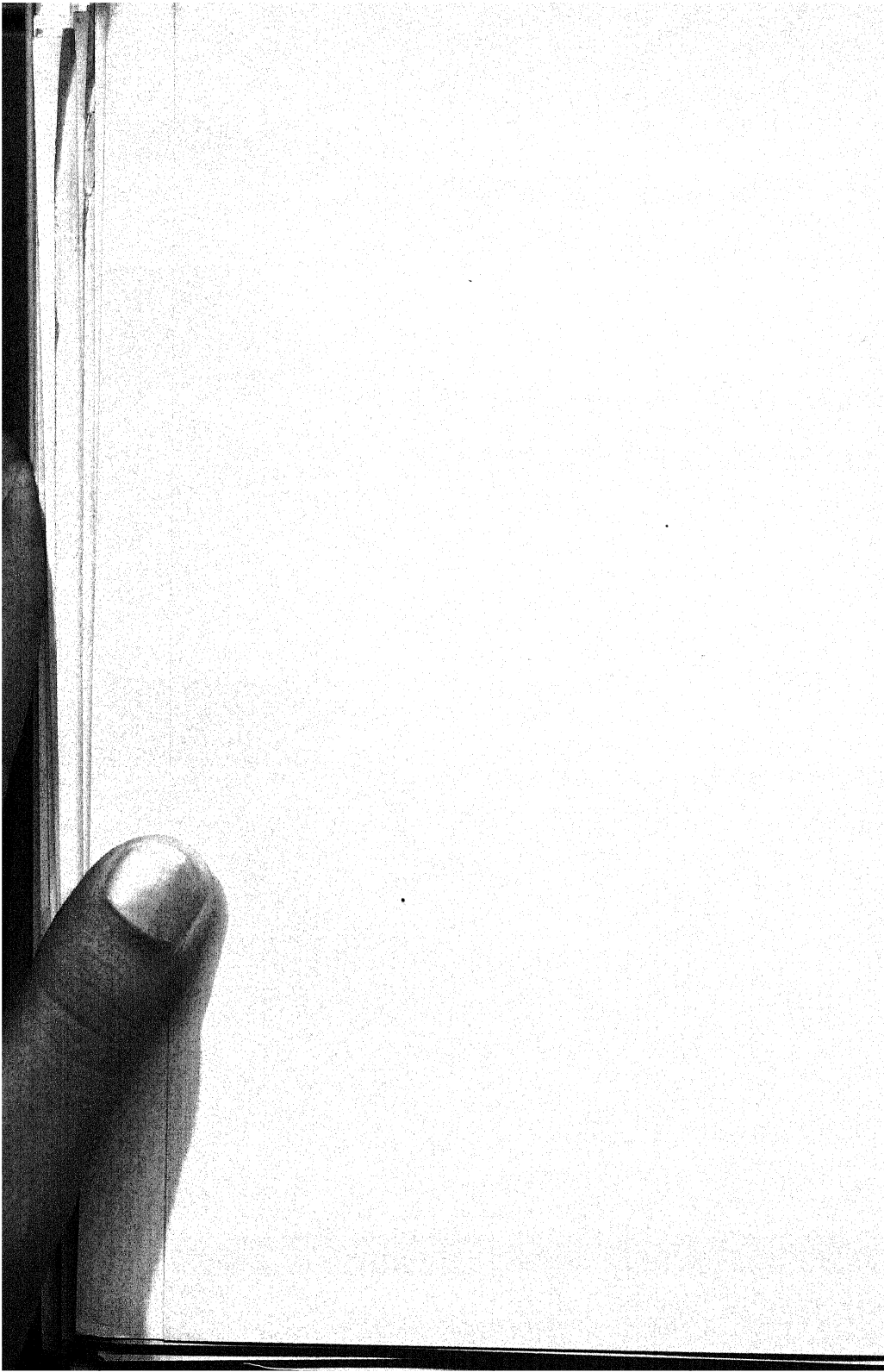


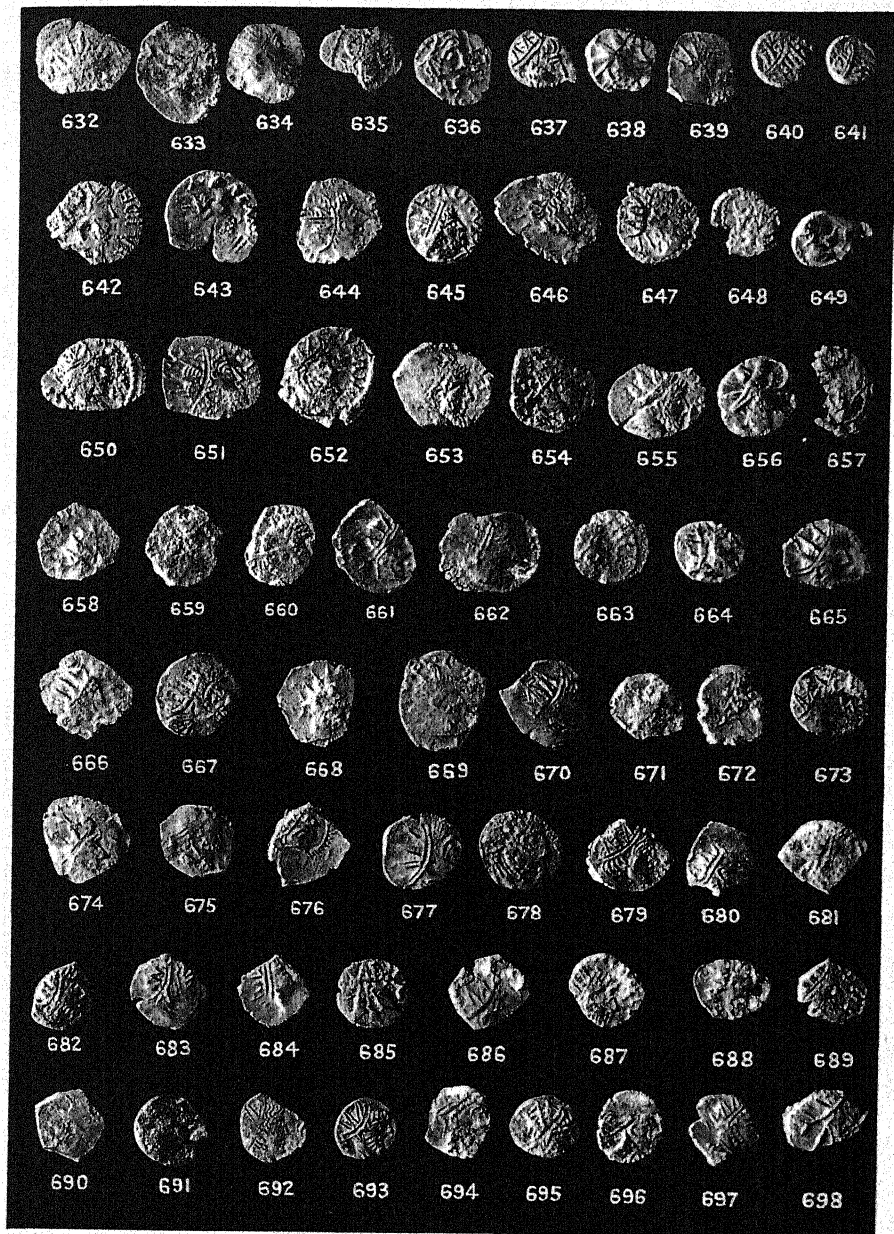
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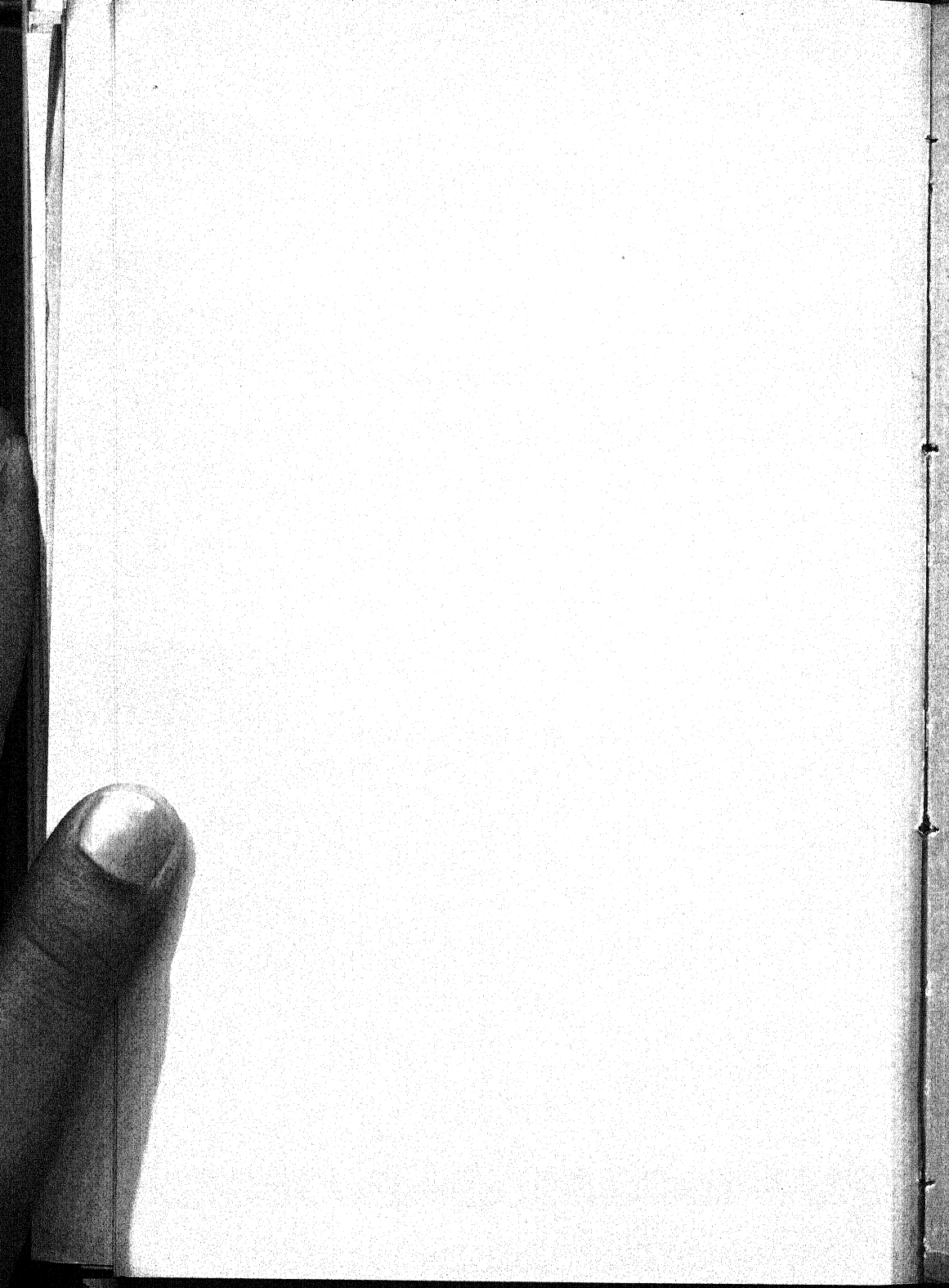


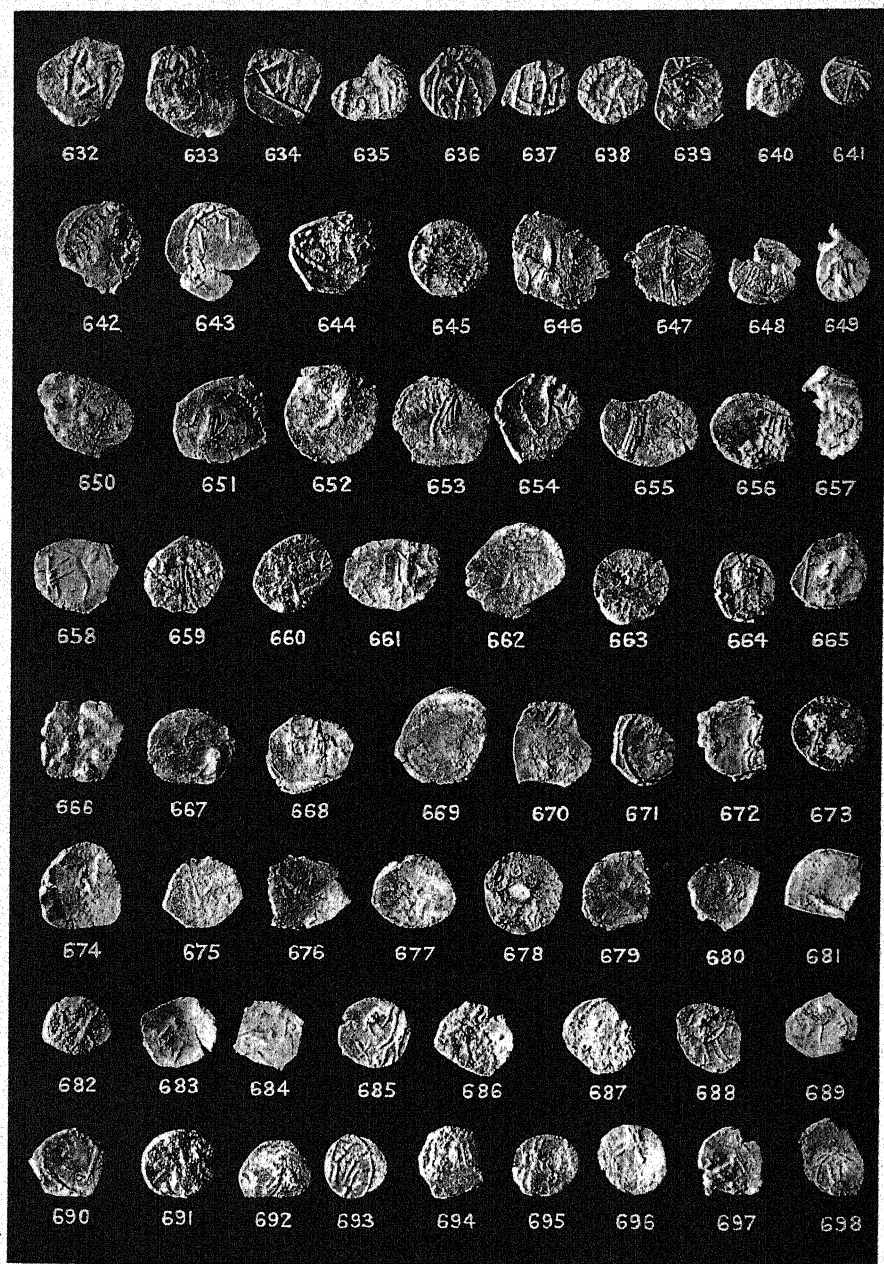
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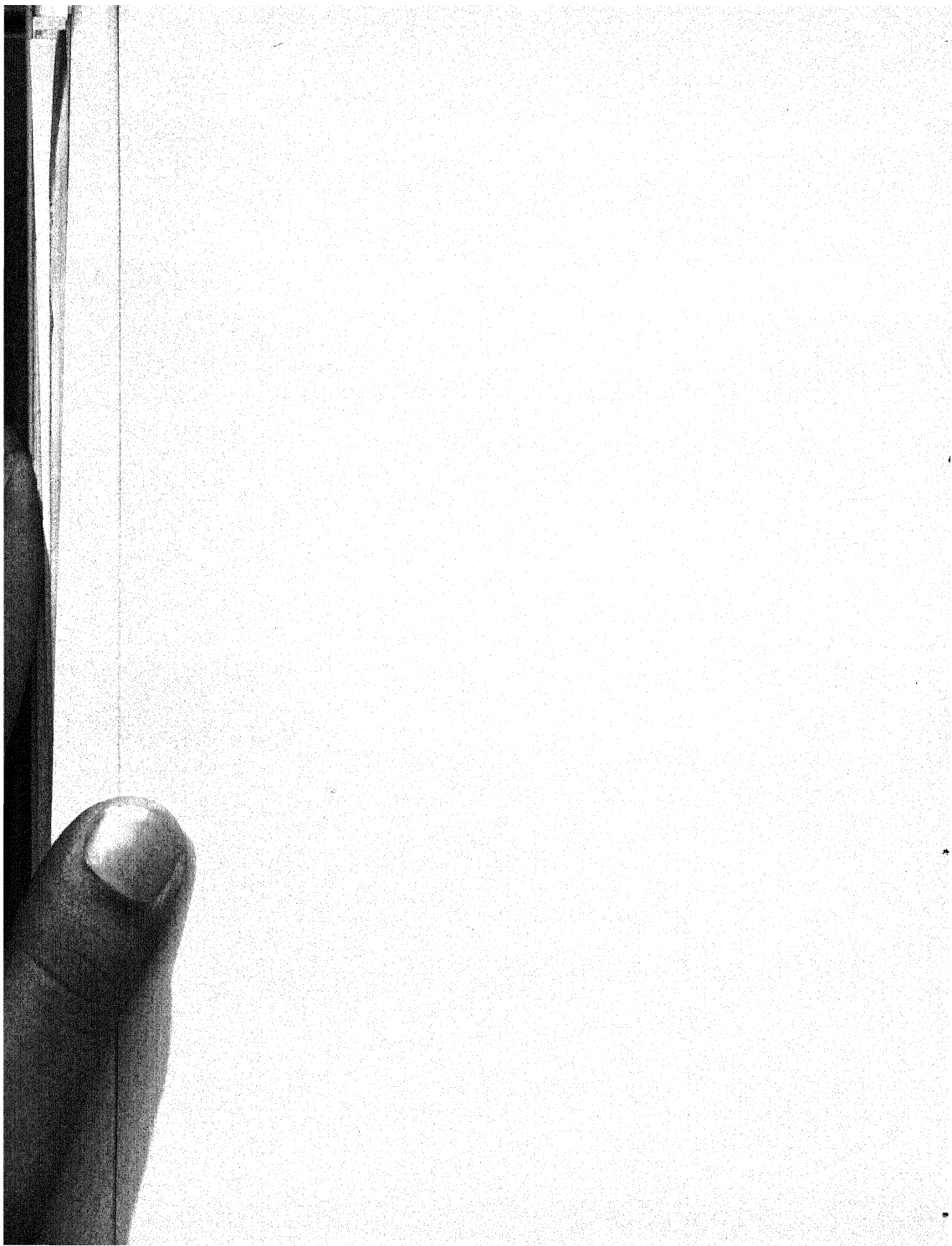


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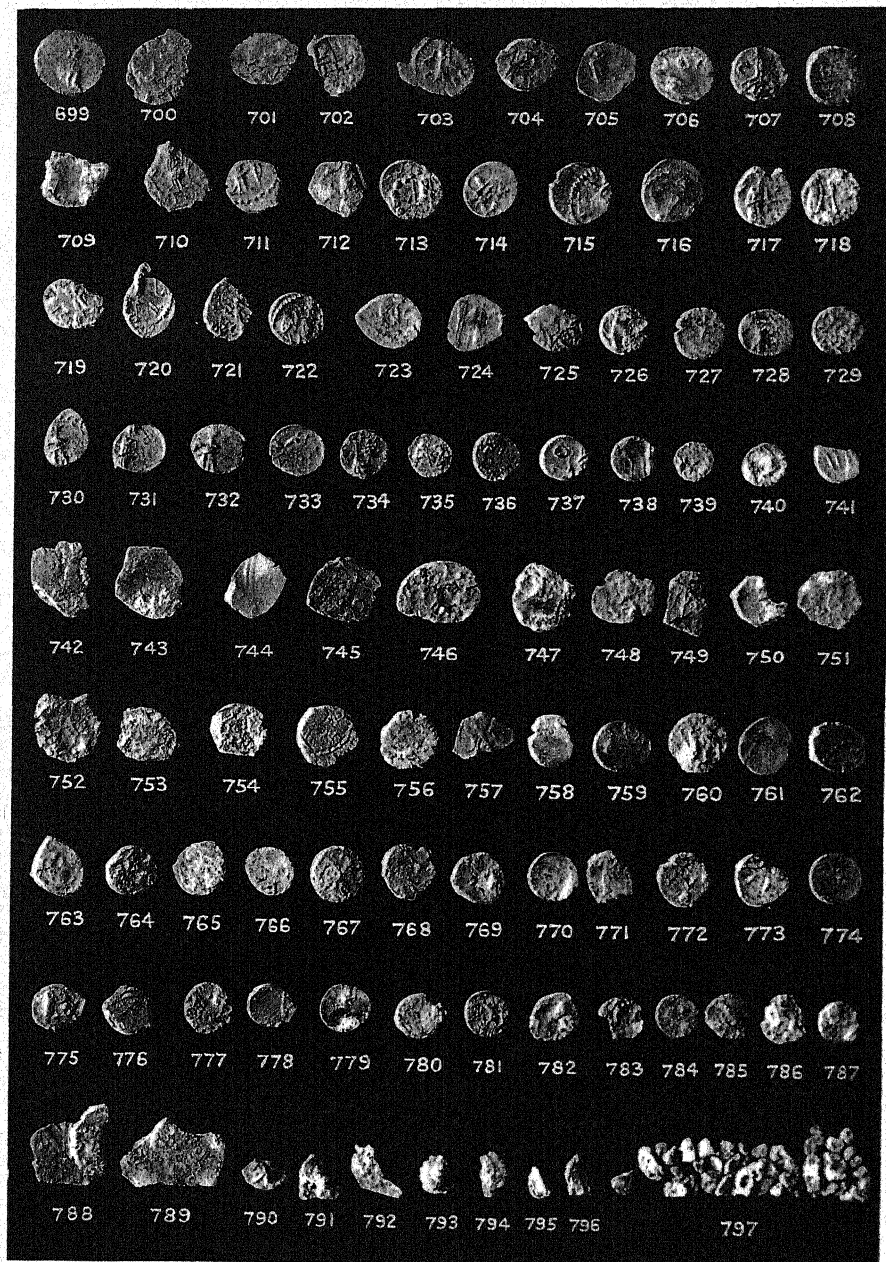


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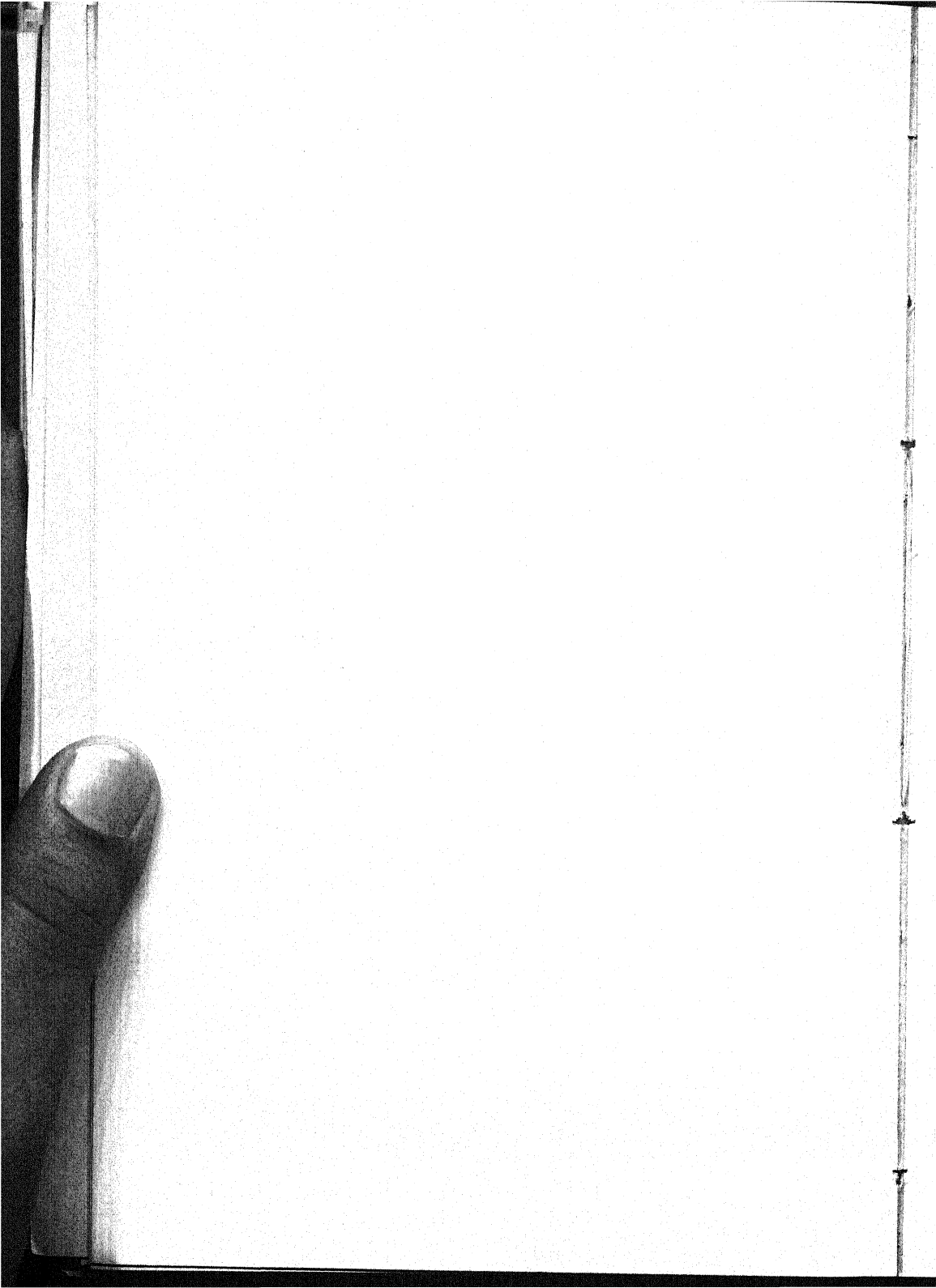
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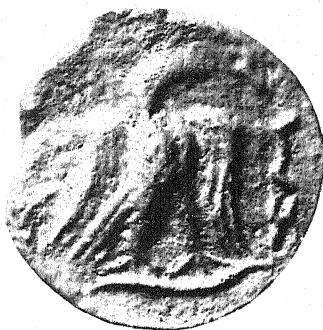
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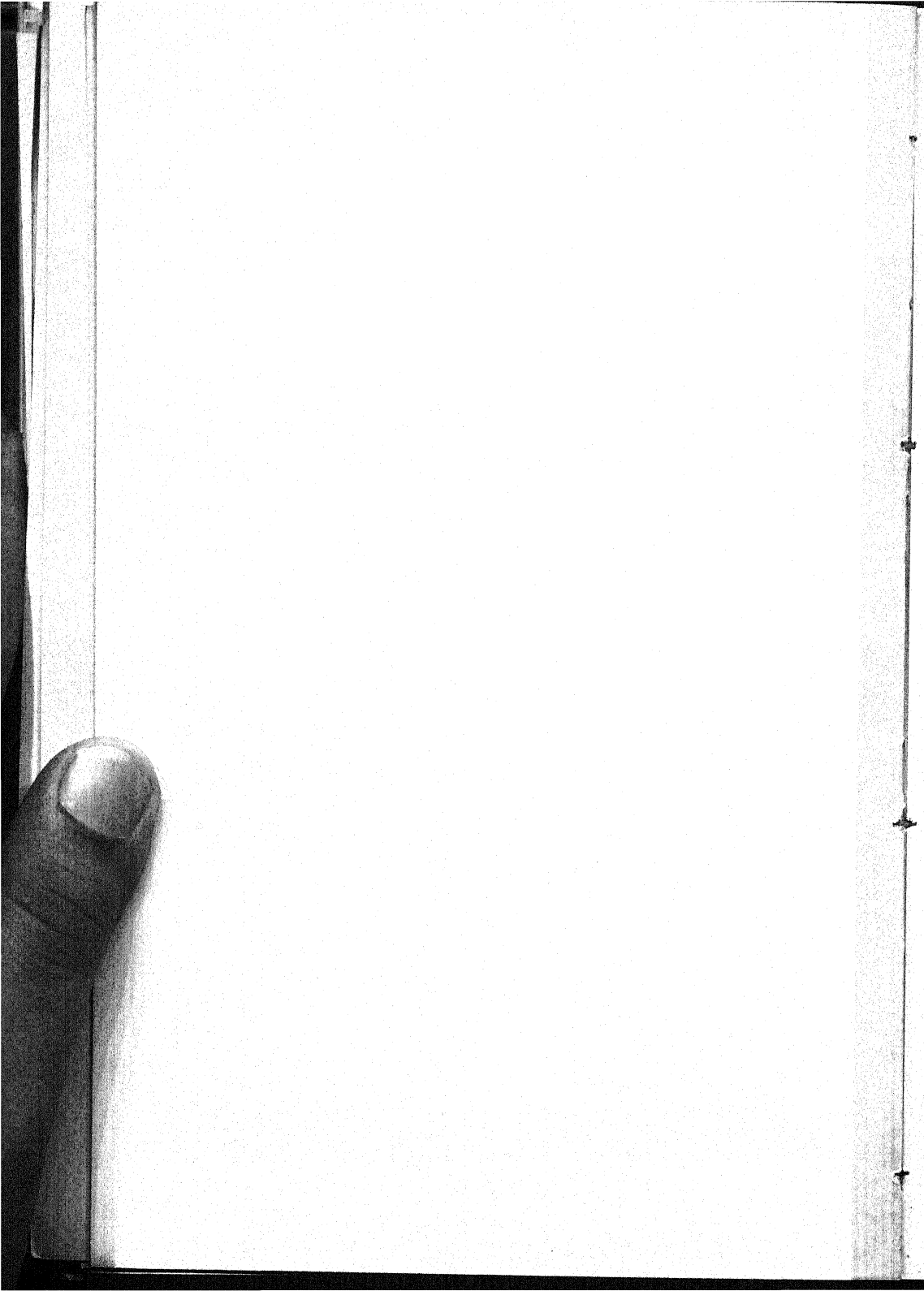
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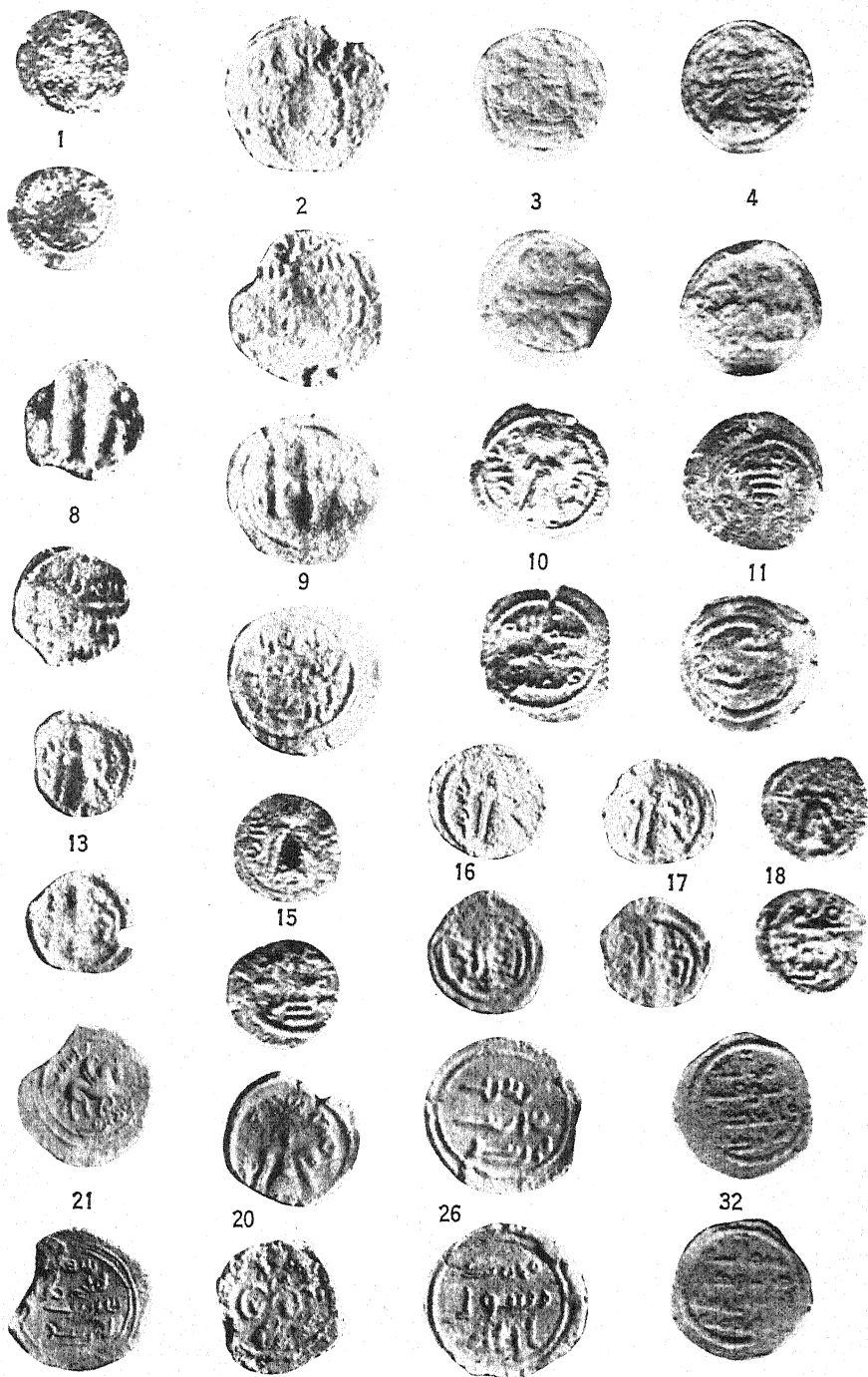


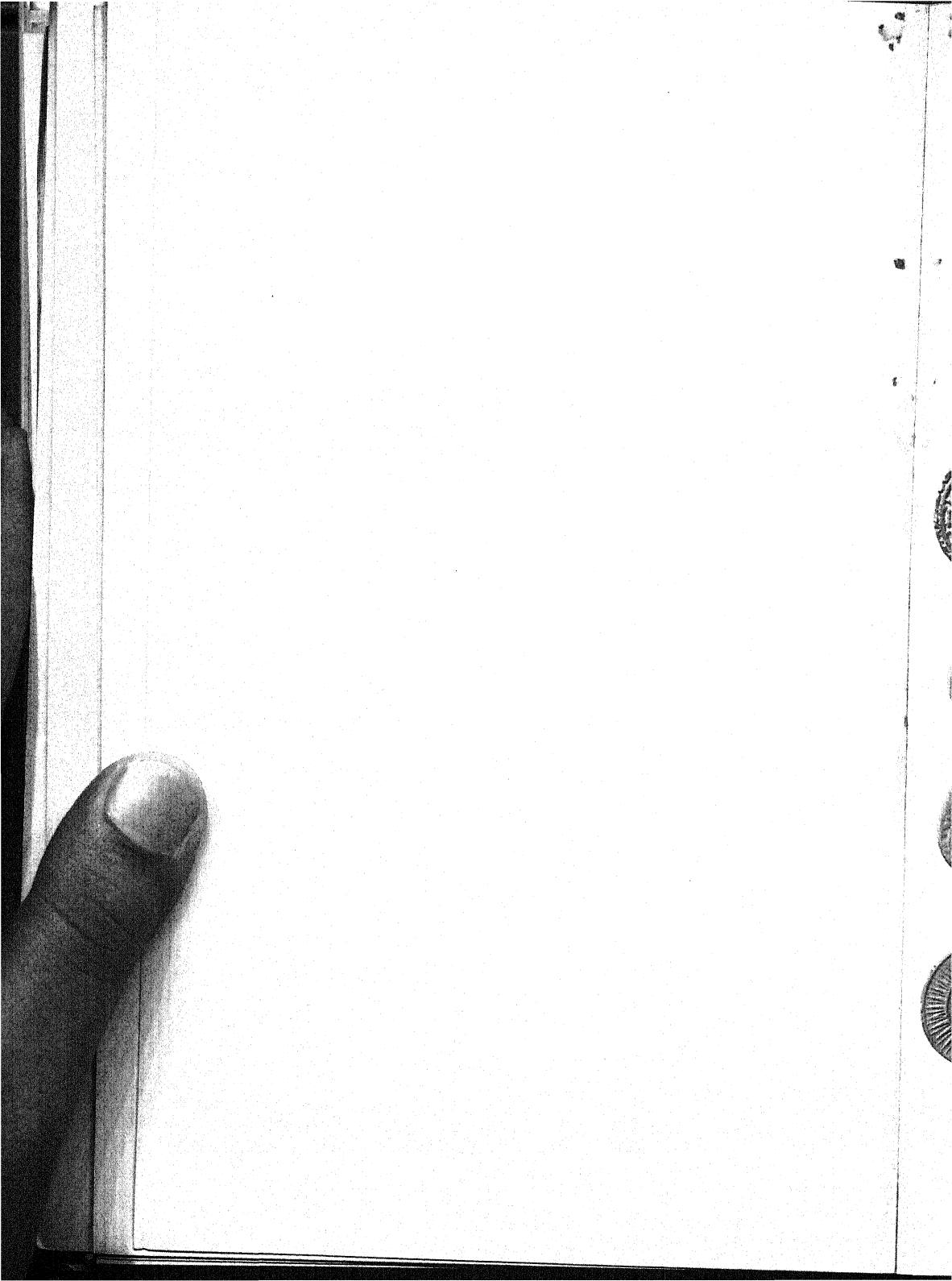
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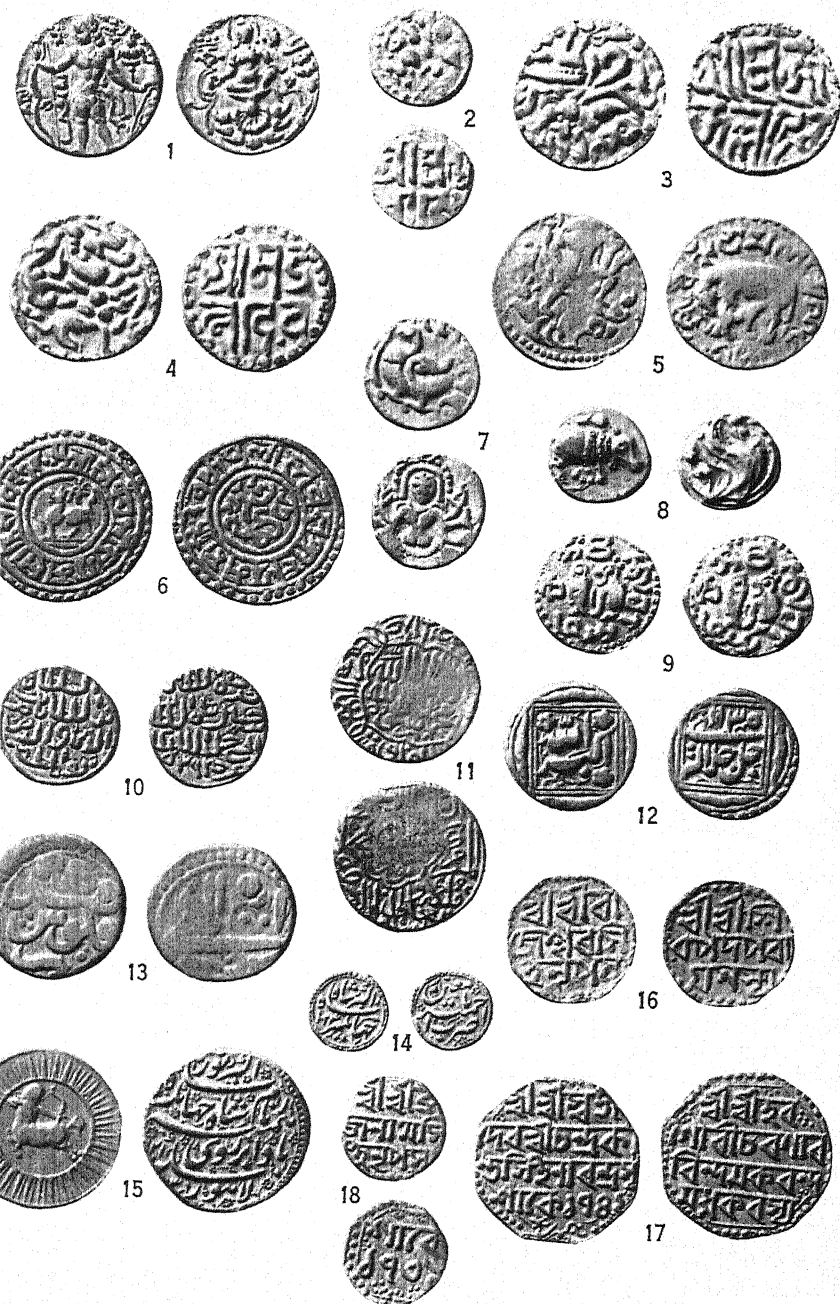


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- 1913 *CODRINGTON, HUMPHREY W., Esq., B.A., M.R.A.S., 142 Oakwood Court, W. 14.
- 1937 COMENCINI, M., Esq., 100 Riverside Road, Romford, Essex.
- 1932 COPENHAGEN, The National Museum, Møntsamling.
- 1926 CÔTE, M. CLAUDIUS, 33 Rue du Plat, Lyons, France.
- 1902 COVERNTON, J. G., Esq., M.A., C.I.E., Parsonage House, Finchingfield, Braintree, Essex.
- 1919 *CRASTER, H. H. E., Esq., M.A., D.Litt., Litt.D., F.S.A., *Bodley's Librarian*, Oxford.
- 1920 CROSS, A. PEARL, Esq., F.R.G.S., 35 St. Martin's Court, W.C. 2.
- 1914 CROWTHER-BEYNON, V. B., Esq., M.B.E., M.A., F.S.A., Beckington, near Bath.
- 1934 DAKERS, H. J., Esq., M.A., 3 Belmont Hill, St. Albans.
- 1930 DAVIS, A. W., Esq., British Embassy, Baghdad.
- 1933 DENTON, ARTHUR RIDGWAY, Esq., The Myrtles, Haygate Road, Wellington, Shropshire.
- 1922 DICKSON, REV. W. H. FANE, Gorsley Vicarage, Gloucester.
- 1919 DRABBLE, G. C., Esq., Los Altos, Sandown, Isle of Wight.
- 1920 EMPEDOCLES, G., Esq., 34 Academy Street, Athens, Greece.
- 1872 *EVANS, SIR ARTHUR J., M.A., D.Litt., LL.D., Ph.D., F.R.S., Hon. V.-P.S.A., F.B.A., Corr. de l'Inst., Youlbury, near Oxford.
- 1892 *EVANS, LADY, M.A. (Oxon.), 9 Kensington Park Gardens, W. 11.
- 1905 FAIRBAIRN, SIDNEY H., Esq., M.A., M.D., 11 Bolton Gardens, S.W. 5.
- 1904 *FARQUHAR, MISS HELEN, 6 Lowndes Street, S.W. 1.
- 1921 FAULKNER, W. J., Esq., Sutton House, Endon, Stoke-on-Trent.
- 1910 FISHER LIBRARY, THE, University, Sydney, N.S.W.
- 1908 FITZWILLIAM MUSEUM, The Director, Cambridge.
- 1898 FÖRRER, L., Esq., Helvetia, 24 Homefield Road, Bromley, Kent.

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- 1928 FORRER, LEONARD STEYNING, Esq., Fair Mead, 1 Wanstead Road, Bromley, Kent.
- 1896 *FRY, CLAUDE BASIL, Esq., Hannington Hall, Highworth, Wilts.
- 1897 *GANS, LEOPOLD, Esq., 207 Maddison Street, Chicago, U.S.A.
- 1912 GANTZ, REV. W. L., M.A., C.F., St. Michael's Cottage, The Avenue, Camberley, Surrey.
- 1871 †GARDNER, PROFESSOR PERCY, M.A., D.Litt., Litt.D., LL.D., F.S.A., F.B.A., 12 Canterbury Road, Oxford.
- 1907 GARDNER, WILLOUGHBY, Esq., D.Sc., F.S.A., F.L.S., F.R.G.S., Y Berlfa, Deganwy, North Wales.
- 1889 †GARSIDE, HENRY, Esq., 46 Queen's Road, Teddington, Middlesex.
- 1928 GAVIN, THE VEN. ARCHDEACON GORDON HAY, St. Mary's Vicarage, New Plymouth, Taranaki, New Zealand.
- 1913 GILBERT, WILLIAM, Esq., M.S.A., 74 Broad Street Avenue, E.C. 2, *Foreign Secretary*.
- 1920 GINORI, MARCHESE ROBERTO VENTURI, 75 Via della Scala, Florence, Italy.
- 1894 GOODACRE, HUGH, Esq., Ullesthorpe Court, Lutterworth, Rugby.
- 1936 GOURLAY, W. R., Esq., C.I.E., C.S.I., M.A., F.R.G.S., J.P., Kenbank, Dalry, Castle Douglas, Galloway.
- 1936 GRANT, MICHAEL, Esq., B.A., 18 Victoria Grove, W. 8.
- 1891 *GRANTLEY, LORD, D.L., J.P., F.S.A., Weeke Manor, Winchester, Hants.
- 1914 GROSE, S. W., Esq., M.A., *Honorary Curator of Coins in the Fitzwilliam Museum*, 18 Hobson Street, Cambridge.
- 1916 HAINES, GEOFFREY COLTON, Esq., F.S.A., 31 Larpent Avenue, Putney, London, S.W. 15, *Hon. Treasurer*.
- 1899 HALL, HENRY PLATT, Esq., Pentreheylin Hall, Llanymynech, Montgomeryshire.
- 1933 HANSEN, FRANTS JOHAN, Esq., Woodstock, Hurst Road, Bexley, Kent.
- 1904 HARRISON, FREDERICK A., Esq., F.Z.S., 40 Wembley Park Drive, Wembley, Middlesex, *Librarian*.
- 1916 *HART, R. EDWARD, Esq., M.A., Brooklands, Blackburn.
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- 1928 HAYTER, G. C. F., Esq., B.A., F.S.A., 18 Denewood Road, N. 8.
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- 1934 HEITHAUS, REV. CLAUDE H., 6 Endsleigh Street, W.C. 1.
- 1930 HERZFELDER, HUBERT, Esq., 77 Rue des Saints Pères, Paris VI.
- 1900 HEWLETT, LIONEL M., Esq., Greenbank, Byron Hill, Harrow-on-the-Hill, Middlesex.
- 1932 HILDYARD, E. J. W., Esq., Harsley Hall, Eastgate, Co. Durham.
- 1893 HILL, SIR GEORGE, K.C.B., M.A., D.C.L., LL.D., Litt.D., F.S.A., F.B.A., 12 Sussex Place, N.W. 1, *Honorary Vice-President*.
- 1895 HODGE, THOMAS, Esq., Fyning House, Rogate, Petersfield, Hants.
- 1937 HOHENKUBIN, MARQUIS ALBRECHT DE, 32 Weihburggasse, Vienna I.
- 1920 *HOLROYD, MICHAEL, Esq., M.A., F.S.A., Brasenose College, Oxford.
- 1908 *HUNTINGTON, ARCHER M., Esq., Honorary President of the American Numismatic Society, Audubon Park, 156th Street, West of Broadway, New York, U.S.A.
- 1922 JAMESON, Monsieur R., 8 Avenue Velasquez, Paris VIII^e.
- 1914 *KERR, ROBERT, Esq., M.A., Royal Scottish Museum, Edinburgh.
- 1920 KING, COLONEL E. J., C.M.G., A.D.C., M.A., F.S.A., F.R.Hist.Soc., The Old House, East End Road, N. 2.
- 1917 LAMB, MISS WINIFRED, Holly Lodge, Campden Hill, W. 8.
- 1920 LAST, PROFESSOR H. M., Esq., M.A., Brasenose College, Oxford.
- 1885 *LAWRENCE, L. A., Esq., F.R.C.S., F.S.A., 44 Belsize Square, N.W. 3.
- 1920 LEWIS, JOHN CAMPBELL, Esq., Bridge House, Troedyrhiw, Merthyr Tydfil, Wales.
- 1922 *LLOYD, MISS MURIEL ELEANOR HAYDON, 7 Manor Court, Pinehurst, Cambridge.
- 1907 LOCKETT, RICHARD CYRIL, Esq., J.P., F.S.A., 58 Cadogan Place, S.W. 1.
- 1921 LUCKNOW MUSEUM, The Curator of the, Lucknow, India.

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- 1934 *MABBOTT, PROF. T. O., 56 East 87th Street, New York City, U.S.A.
- 1895 MACDONALD, SIR GEORGE, K.C.B., P.S.A. (Scot.), M.A., LL.D., D.Litt., Litt.D., F.B.A., 17 Learmonth Gardens, Edinburgh.
- 1901 MACFADYEN, FRANK E., Esq., 17 St. George's Terrace, Newcastle-on-Tyne.
- 1923 MALLINSON, REV. ARNOLD, c/o St. Frideswide's Vicarage, Oxford.
- 1932 MARTIN, CAPTAIN M. F. C., R.E., Ardlonghor, Killylea, Co. Armagh.
- 1912 MATTINGLY, HAROLD, Esq., M.A., British Museum, W.C. 1, *Vice-President*.
- 1905 MAVROGORDATO, J., Esq., Gilridge, Cowden Pound, Edenbridge, Kent.
- 1937 DE MAYO, M., Marcel, Strada Luterana 21, Bucharest.
- 1929 McNICKLE, A. J. S., Esq., c/o Royal Mail Steam Packet Co., Royal Mail House, E.C. 2.
- 1916 MEIGH, ALFRED, Esq., Dole Spring House, Forsbrook, Stoke-on-Trent.
- 1905 MESSENGER, LEOPOLD G. P., Esq., 151 Brecknock Road, Tufnell Park, N. 19.
- 1928 MIDDLETON, LAWRENCE H., Esq., M.A., 11 A High Street, N.W. 8.
- 1934 MIDDLETON, ARTHUR PIERCE, Esq., M.A., F.S.A. (Scot.), 12 East 97th Street, New York City, U.S.A.
- 1929 MILBANK, S. R., Esq., Panfield, Huntingdon, New York, U.S.A.
- 1924 MILLER, HOYT, Esq., East Shore Road, Great Neck, Long Island, New York, U.S.A.
- 1897 MILNE, J. GRAFTON, Esq., M.A., D.Litt., 23 Belsyre Court, Woodstock Road, Oxford.
- 1921 MILNE, MRS. J. GRAFTON, 23 Belsyre Court, Woodstock Road, Oxford.
- 1932 MITCHELL, D. D., Esq., 19 Norman Avenue, St. Margaret's, Twickenham.
- 1910 MITCHELL LIBRARY, THE, Glasgow, The Librarian.
- 1888 MONTAGUE, LIEUT.-COL. L. A. D., Penton, near Crediton, Devon.
- 1937 MORTON, H. V., Esq., 35 Grosvenor Place, S.W. 1.
- 1933 MYERS, OLIVER H., Esq., 200 Euston Road, N.W. 1.
- 1916 *MYLNE, EVERARD, Esq., B.A., St. Andrew's College, Grahamstown, South Africa.

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- 1906 NEWBERRY LIBRARY, The Librarian, Chicago, U.S.A.
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- 1904 NEWINGTON PUBLIC LIBRARY, The Librarian, Walworth Road, S.E. 17.
- 1931 NIETER, HANS M., Esq., 41 A Golders Green Road, N.W. 11.
- 1930 NORTHUMBERLAND, THE DUKE OF, 17 Princes Gate, S.W. 7.
- 1936 NOTMAN, JOHN W., Esq., 79 B Philbeach Gardens, S.W. 5.
- 1937 NUSSBAUM, DR. H., Bahnhofstrasse 32, Zürich.
- 1882 OMAN, PROFESSOR SIR CHARLES, K.B.E., M.A., D.C.L., LL.D., F.S.A., F.B.A., Frewin Hall, Oxford, *Vice-President*.
- 1925 OMAN, CHARLES CHICHELE, Esq., M.A., Victoria and Albert Museum, S.W. 7.
- 1931 O'NEIL, B. H. St. J., Esq., M.A., F.S.A., 14 Crescent Road, Beckenham, Kent.
- 1932 OSLO, Universitetets Myntkabinet, Norway.
- 1922 PAKENHAM, IVO R. R. L., Esq., St. James's Club, 106 Piccadilly, W. 1.
- 1903 PARSONS, H. ALEXANDER, Esq., Frampton Place, Frampton Mansell, Near Stroud, Glos.
- 1937 PASLEY-WILLIAMSON, CAPTAIN W. H., 85 Warwick Road, S.W. 5.
- 1936 PEARCE, BERTRAM W., Esq., F.S.A., Sunnymead, Ash Road, Sandwich.
- 1926 PEARCE, J. W. E., Esq., M.A., F.S.A., 10 Cromwell Place, S.W. 7.
- 1936 PHILIP-PHILLIPS, GODFREY S., Esq., 118 Queen's Gate, S.W. 7.
- 1927 PINCHES, JOHN ROBERT, Esq., 21 Albert Embankment, S.E. 11.
- 1928 PIRIE GORDON, H., Esq., D.S.C., M.A., F.S.A., 46 Addison Avenue, W. 11.
- 1927 POND, SHEPARD, Esq., 258 Boylston Street, Boston, Mass., U.S.A.
- 1936 POOLE, WILLIAM E., Esq., 45 Cromwell Road, Beckenham, Kent.
- 1923 PRAGUE, Bibliothèque de l'Université, Czecho-Slovakia.

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- 1935 RASHLEIGH, J. C. S., Esq., M.A., M.D., Throwleigh, Okehampton, Devon.
- 1937 RATCLIFFE, N. H., Esq., Holly Mount, Rawtenstall, Rossendale, Lancs.
- 1923 RAVEL, MONSIEUR O., 7 Bd. de Lorraine, Pointe Rouge, Marseilles.
- 1937 RAVEN, E. J. P., Esq., The University, Aberdeen.
- 1930 RAWSON, L. H., Esq., Atholl Bank, Lovelace Gardens, Surbiton.
- 1909 RAYMOND, WAYTE, Esq., 465 Park Avenue, New York City, U.S.A.
- 1933 READHEAD, K. R. R., Esq., 157 Woodcote Valley Road, Purley, Surrey.
- 1933 ROBERTS, KENNETH L., Esq., Aberdale, 2 South Road, Newton Abbot.
- 1937 ROBERTSON, MISS ANNE S., M.A., Hunterian Museum, The University, Glasgow.
- 1911 *ROBINSON, E. S. G., Esq., M.A., F.S.A., 23 Upper Phillimore Gardens, W. 8, *Hon. Secretary*.
- 1910 ROGERS, THE VERY REV. EDGAR, O.B.E., M.A., F.S.A., The Deanery, Bocking, Essex.
- 1924 ROWE, CAPTAIN FRANCIS G. C., 65 Finborough Road, S.W. 10.
- 1919 RYAN, V. J. E., Esq., Les Silleries, Grouville, Jersey, C.I.
- 1916 SAINT LOUIS NUMISMATIC SOCIETY, Washington University, St. Louis, Mo., U.S.A.
- 1916 *SALISBURY, F. S., Esq., M.A., Dorset House, Parkland Grove, Ashford, Middlesex.
- 1935 SASSOON, DAVID C., Esq., 12 A Wildcroft Manor, S.W. 15.
- 1917 SEABY, B. A., Esq., 65 Great Portland Street, W. 1.
- 1907 *SELTMAN, CHARLES T., Esq., M.A., Queens' College, Cambridge.
- 1890 SELTMAN, E. J., Esq., Villa Maria, S. Giorgio a Cremano, Naples.
- 1936 SHEAR, MRS. T. LESLIE, 12 Battle Road, Princeton, N.J., U.S.A.
- 1913 SHIRLEY-FOX, J. S., Esq., R.B.A., 16 Brock Street, Bath.
- 1893 *SIMS, BRIG.-GENERAL R. F. MANLEY-, C.M.G., D.S.O., 163 Strand, W.C. 2.
- 1934 SMITH, WELBORN OWSTON, Esq., M.A., 41 Molyneux Park, Tunbridge Wells.
- 1905 SNELLING, EDWARD, Esq., 8 Amberley Road, E. 10.

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- 1930 SNIJDER, PROFESSOR G. A. S., Allard Pierson Stichting, Weesperzijde 33, Amsterdam (O.).
- 1922 SPENCER-CHURCHILL, CAPT. E. G., M.C., F.S.A., Northwick Park, Blockley, Worcestershire.
- 1936 SPINK, DAVID F., Esq., 5-7 King Street, S.W. 1.
- 1894 SPINK, SAMUEL M., Esq., 5-7 King Street, S.W. 1.
- 1902 STAINER, CHARLES LEWIS, Esq., Woodhouse, Ilfey, Oxford.
- 1928 STEBBING, W. P. D., Esq., F.S.A., Fiveways, Deal.
- 1932 STEWART, JAMES R., Esq., Park Cottage, Kingsdown, Taunton.
- 1931 STRAUSS, M. LOUIS, Cala Ratjada, Capdepera, Mallorca, Spain.
- 1933 SUTHERLAND, ALLAN, Esq., c/o Hansard, Parliament House, Wellington, New Zealand.
- 1936 SUTHERLAND, C. H. V., Esq., M.A., 13 Park Terrace, Oxford.
- 1914 SYDENHAM, REV. EDWARD A., M.A., The Vicarage, West Molesey, Surrey, *President*.
- 1896 *TAFPS, H. W., Esq., M.B.E., 27 Elderslie Road, Eltham, S.E. 9.
- 1919 TARAPOREVALA, VICAJI D. B., Esq., Tarapore Villa, 79 Koregaon Park, Poona, C. P., India.
- 1925 THOMAS, CECIL, Esq., 7 Gloucester Terrace, S.W. 7.
- 1920 THOMAS, J. ROCHELLE, Esq., 18 Ilchester Place, W. 14.
- 1936 THOMPSON, JAMES DAVID ANTHONY, Esq., 5 Chadlington Road, Oxford.
- 1918 THORBURN, PHILIP, Esq., B.A., 86 Rochester Row, S.W. 1.
- 1935 TINCHANT, M. PAUL, 19 Avenue des Arts, Brussels.
- 1929 TORONTO, University of, The Librarian, Canada.
- 1934 ULRICH-BANSA, COLONELE OSCAR, 9 Riviera S. Nicolò, Venice (Lido), Italy.
- 1912 VAN BUREN, DR. A. W., American Academy, Porta San Pancrazio, Rome (29).
- 1923 WALES, THE NATIONAL MUSEUM OF, Cardiff.
- 1932 WALKER, JOHN, Esq., M.A., M.R.A.S., British Museum, W.C. 1.
- 1924 WALLWORTH, I. N. G., Esq., Fairbanks, Stanley Park Road, Carshalton.

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- 1911 WARRE, FELIX W., Esq., O.B.E., M.C., 128 Church Street,
W. 8.
- 1920 *WATSON, COMMANDER HAROLD NEWALL, R.N.
- 1885 *WEBER, F. PARKES, Esq., M.D., F.S.A., 13 Harley
Street, W. 1.
- 1932 WERNSTROM, ERNEST, Esq., P.O. Box 384, San Francisco,
U.S.A.
- 1915 WHITEHEAD, R. B., Esq., M.A., M.R.A.S., I.C.S. (retd.),
30 Millington Road, Cambridge.
- 1937 WHITTON, C. A., Esq., The High School, Newcastle, Staffs.
- 1934 WILTSHIRE, R. G., Esq., Longhouse Lodge, Ermyn Way,
Leatherhead.
- 1906 †WOOD, HOWLAND, Esq., Curator of the American Numis-
matic Society, 156th Street, W. of Broadway, New York,
U.S.A.
- 1933 WOOD, MISS MARGARET ENVYS, 14 Bentinck Close, North
Gate, N.W. 8.
- 1920 *WOODWARD, A. M. TRACEY, Esq., Chateau Millefleurs,
Cadaujac, Gironde, France.
- 1920 WOODWARD, W. H., Esq., 48 Campden Hill Gate, W. 8.
- 1903 WRIGHT, H. NELSON, Esq., I.C.S. (retd.), The Larches, West
Hall Road, Upper Warlingham, Surrey.
- 1936 WRIGHTSON, ANTHONY G., Esq., 11 Phillimore Terrace, W. 8.
- 1933 WÜTHRICH, G., Esq., M.I.E.E., 81 Pursers Cross Road,
S.W. 6.
- 1922 YOANNA, A. DE, Esq., B.A., M.D., 111 Pierrepont Street,
Brooklyn, New York, U.S.A.
- 1932 YORKSHIRE ARCHAEOLOGICAL SOCIETY, 10 Park Place,
Leeds.
- 1919 ZIEGLER, PHILIP, Esq., Lilly Villa, Victoria Park,
Manchester.

HONORARY FELLOWS

ELECTED

- 1898 HIS MAJESTY VICTOR EMMANUEL III, KING OF ITALY,
Palazzo Quirinale, Rome.
- 1930 ALFÖLDI, PROFESSOR ANDREAS, Ferencz Jozef Rakpart 25 ,
Budapest.
- 1898 BLANCHET, Monsieur ADRIEN, Membre de l'Institut, 10 Bd.
Émile Augier, Paris XVI.
- 1935 CESANO, SIGNORINA L., Museo Nazionale, Rome.
- 1926 DIEUDONNÉ, MONSIEUR A., 7 Rue Worth Suresnes, Seine,
France.
- 1899 GABRICI, PROFESSOR DR. ETTORE, Via Formale 30, Naples.
- 1937 GALSTER, DR. GEORG, Royal Coin Cabinet, Copenhagen.
- 1932 LAFFRANCHI, SIGNOR L., via Carlo Ravizza 19, Milan.
- 1937 LOEHR, DIREKTOR A. v., Bundessammlung von Medaillen,
Burgring 5, Vienna I.
- 1904 MAURICE, M. JULES, 15 Rue Vaneau, Paris VII.
- 1899 PICK, DR. BEHRENDT, Schwäbische Strasse 9, Berlin, W. 30.
- 1926 TOURNEUR, PROFESSOR VICTOR, Conservateur en chef de la
Bibliothèque Royale, Brussels.

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- 1883 CHARLES ROACH SMITH, F.S.A.
- 1884 AQUILLA SMITH, M.D., M.R.I.A.
- 1885 EDWARD THOMAS, F.R.S.
- 1886 MAJOR-GENERAL ALEXANDER CUNNINGHAM, C.S.I., C.I.E.
- 1887 JOHN EVANS, D.C.L., LL.D., F.R.S., P.S.A.
- 1888 DR. F. IMHOOF-BLUMER, Winterthur.
- 1889 PROFESSOR PERCY GARDNER, Litt.D., F.S.A.
- 1890 MONSIEUR J. P. SIX, Amsterdam.
- 1891 DR. C. LUDWIG MÜLLER, Copenhagen.
- 1892 PROFESSOR R. STUART POOLE, LL.D.
- 1893 M. W. H. WADDINGTON, Sénateur, Membre de l'Institut, Paris.
- 1894 CHARLES FRANCIS KEARY, M.A., F.S.A.
- 1895 PROFESSOR DR. THEODOR MOMMSEN, Berlin.
- 1896 FREDERIC W. MADDEN, M.R.A.S.
- 1897 DR. ALFRED VON SALLET, Berlin.
- 1898 THE REV. CANON W. GREENWELL, M.A., F.R.S., F.S.A.
- 1899 M. ERNEST BABELON, Membre de l'Institut, Paris.
- 1900 PROFESSOR STANLEY LANE-POOLE, M.A., Litt.D.
- 1901 S. E. BARON WLADIMIR VON TIESENHAUSEN, St. Petersburg.
- 1902 ARTHUR J. EVANS, Esq., M.A., F.R.S., F.S.A.
- 1903 M. GUSTAVE SCHLUMBERGER, Membre de l'Institut, Paris.
- 1904 HIS MAJESTY VICTOR EMMANUEL III, KING OF ITALY.
- 1905 SIR HERMANN WEBER, M.D.
- 1906 COMM. FRANCESCO GNECCHI, Milan.
- 1907 BARCLAY V. HEAD, D.Litt., D.C.L., Ph.D., Corr. de l'Inst.
- 1908 PROFESSOR DR. HEINRICH DRESSSEL, Berlin.
- 1909 HERBERT A. GRUEBER, F.S.A.
- 1910 DR. FRIEDRICH EDLER VON KENNER, Vienna.
- 1911 OLIVER CODRINGTON, M.D., M.R.A.S., F.S.A.
- 1912 GENERAL-LEUTNANT MAX VON BAHRFELDT, Hildesheim.
- 1913 GEORGE MACDONALD, Esq., M.A., LL.D.
- 1914 JEAN N. SVORONOS, Athens.
- 1915 GEORGE FRANCIS HILL, Esq., M.A.
- 1916 M. THÉODORE REINACH, Membre de l'Institut, Paris.
- 1917 L. A. LAWRENCE, Esq., F.S.A.
- 1918 Not awarded.
- 1919 M. ADRIEN BLANCHET, Membre de l'Institut, Paris.
- 1920 H. B. EARLE-FOX and J. S. SHIRLEY-FOX, Esq.
- 1921 PERCY H. WEBB.
- 1922 FREDERICK A. WALTERS, F.S.A.
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- 1924 HENRY SYMONDS, F.S.A.
- 1925 EDWARD T. NEWELL, Esq., New York.

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- 1926 R. W. MACLACHLAN, Montreal.
1927 M. A. DIEUDONNÉ, Paris.
1928 SIR CHARLES OMAN, K.B.E., M.P., D.C.L., F.B.A.
1929 MONSIEUR JULES MAURICE, Paris.
1930 REV. EDWARD A. SYDENHAM, M.A.
1931 MISS HELEN FARQUHAR.
1932 H. NELSON WRIGHT, Esq., I.C.S. (ret'd.).
1933 DIREKTOR PROFESSOR KURT REGLING, Berlin.
1934 GEORGE CYRIL BROOKE (posthumously).
1935 PROFESSOR DR. BEHRENDT PICK, Gotha.
1936 JOHN ALLAN, Esq., M.A., F.S.A.
1937 PROFESSOR VICTOR TOURNEUR, Brussels.



PROCEEDINGS OF THE
ROYAL NUMISMATIC SOCIETY.



PROCEEDINGS OF THE ROYAL NUMISMATIC SOCIETY.

SESSION 1936—1937.

OCTOBER 15, 1936.

ORDINARY MEETING.

PERCY H. WEBB, Esq., M.B.E., President, in the Chair.

The Minutes of the Meeting of May 21 were read and approved.

Mrs. T. Leslie Shear and Messrs. J. D. Anthony Thompson, Michael Grant, and David F. Spink were proposed for election.

The President congratulated the Society on the success of the Numismatic Congress held in July, and moved that a vote of thanks be given to those officers who had taken an active part in its organization. Mr. Allan, in replying, said that any credit for the success of the Centenary celebrations was really due to Mr. Webb's foresight and initiative in seeing that arrangements were discussed and made well ahead.

Mr. Henry Garside exhibited the shilling of New Guinea of 1935.

Mr. H. P. Hall showed a fine series of coins relating to the Roman campaigns in Palestine :—

Three sestertii of Vespasian, representing three of the varieties of the IVDAEA CAPTA type, Cohen nos. 234, 239, and 239 variety. The third of these coins reads IVDEA in place of the usual IVDAEA.

Two aureii of Vespasian, Cohen 225 and 230, both with *rev.* legend IVDAEA. Types: Iudaea seated on ground at foot of trophy, and Iudaea in a similar position at foot of a palm-tree. The first from the Bosco Reale find.

Two sestertii of Vespasian, Cohen 620—a rare type—and 625, both bearing the reverse legend **VICTORIA AVGVSTI** and struck in commemoration of Vespasian's Jewish victories.

Sestertius of Titus, Cohen 110. **IVDAEA CAPTA** type.

Sestertius of Nerva, Cohen 54 with *rev.* Palm-tree and legend **FISCI IVDAICI CALVMNIA SVBLATA**. A difficult coin to meet with in fine condition, and struck in commemoration of the tax concessions made to the Jews by Nerva.

Sestertius of Hadrian, Cohen 51 with *rev.* legend **ADVENTVI AVGVDAEAE**. One of the series of coins struck by Hadrian as a record of his journeys throughout the Empire.

Mr. Hall also showed an *as* of Quietus, son of Macrianus, A.D. 260. Cohen 2. *Rev.* **AEQVTAS AVGG.** Equity standing l. with scales and cornucopiae.

Mr. W. Gilbert showed an aureus of Numerian (Cohen 33), *rev.* **ORIENS AVGG.**, wt. 81 grains, in remarkable condition.

Mr. Frederick A. Harrison, F.Z.S., exhibited an interesting series of silver coins of China showing the remarkable evolution gone through in the last fifty years.

Mr. V. B. Crowther-Beynon, F.S.A., showed a fine series of counters to illustrate Mr. Lawrence's paper.

The series of medals presented to the Society by the Copenhagen Numismatic Society, the Swedish Numismatic Society, and the Swedish Academy were also exhibited.

The President presented the Society with a fine framed photograph of himself.

Mr. L. A. Lawrence, F.S.A., read a paper on the casting counters of the thirteenth and fourteenth centuries in which he showed that the earliest counters for use with the abacus could be dated very closely by comparison with the types of Edward pennies from which they were copied. He explained the use of these counters, which were pierced to prevent their being passed as coins. These counters were evidently made at the mint and showed remarkable parallelism with the coins. Much could be done for later series on the lines laid down by Mr. Lawrence.

Mr. Harrison pointed out how the abacus survived as the "counter" of a shop.

NOVEMBER 19, 1936.

ORDINARY MEETING.

PERCY H. WEBB, Esq., M.B.E., President, in the Chair.

The Minutes of the Meeting of Oct. 15 were read and approved.

Mrs. T. Leslie Shear, Messrs. Michael Grant, David F. Spink, and J. D. A. Thompson were elected Fellows of the Society, and the Count Chandon de Briailles, Messrs. J. W. Notman, and William E. Poole proposed for election.

Mr. Frederick A. Harrison, F.Z.S., exhibited an interesting series of French coins, covering the period from the outbreak of the French Revolution to the end of the reign of Louis XVIII.

Mr. Henry Garside exhibited the 1936 Canadian dollar with the normal obverse legend.

Mr. C. J. Bunn showed 15 French medals of the period 1830-1849.

The President showed two medals issued by the Society of Miniature Rifle Clubs.

Mr. William Gilbert exhibited a very fine aureus of Crispus (Cohen no. 56), wt. 68.5 gr.

Dr. S. H. Fairbairn gave a lecture on "The Medals of the French Revolution of 1848", in which he sketched the history of the period and the various stages of the Revolution. The lecture was illustrated by a large number of slides of medals relating to every event of importance. These medals, which are almost all hurriedly cast pieces of lead, were propagandist rather than commemorative in intention. (This paper appears in the volume of *Transactions of the Numismatic Congress*.)

DECEMBER 17, 1936.

ORDINARY MEETING.

PERCY H. WEBB, Esq., M.B.E., President, in the Chair.

The Minutes of the Meeting of November 19 were read and approved.

The President read the following memorandum from the Keeper of the Privy Purse.

PRIVY PURSE OFFICE,
BUCKINGHAM PALACE, S.W.

Memorandum.

The Keeper of the Privy Purse is commanded by the King to state that His Majesty is pleased to intimate to those Societies and Institutions which were recently granted Patronage by King Edward VIII that they may continue to show the Sovereign as their Patron during the present Reign unless otherwise notified.

14th December 1936.

The Marquess Albrecht de Hohenkubin, Messrs. C. A. Whitton, and H. M. Choudhury were proposed for election. The Count Chandon de Briailles and Messrs. J. W. Notman and W. E. Poole were elected Fellows of the Society.

The evening was devoted to notes and exhibitions.

Mr. L. G. P. Messenger showed four rare first brass of Titus, Domitian, and Hadrian.

Mr. L. A. Lawrence, F.S.A., showed four half-nobles of Edward III and a Tournay groat of Henry VIII.

Mr. Webb showed 6 aurei of Trajan, Marcus Aurelius, Probus, and Diocletian.

Mr. H. Mattingly exhibited 8 coins from the Richborough radiate hoard of 1931, combining radiate head with fourth-century reverse.

Mr. W. Owston Smith showed five thalers of the last two Dukes of Pomerania and one of the three young Margraves of Ansbach.

Mr. W. Gilbert showed Tanner's pattern two-guinea piece of 1768 in brilliant condition.

Mr. H. Nelson Wright exhibited a mohur of Jahangir of Agra.

Mr. P. Thorburn exhibited a large rupee of 'Alam II of Shahjahanabad, A.H. 1218.

Dr. Fairbairn exhibited four Spanish medals of the First Carlist War, including the medal given to members of the de Lacy Evans force.

Mr. Derek Allen read notes on an unpublished Anglo-Saxon coin of a king Eadric, a new sceatta, an Early English coin weight, and a ticket for the touching ceremony of Charles I.

Mr. J. W. E. Pearce, F.S.A., read a note on the problems of the *Vota* issues.

JANUARY 21, 1937.

ORDINARY MEETING.

V. B. CROWTHER-BEYNON, Esq., F.S.A., Vice-President, in the Chair.

The Minutes of the Meeting of December 17 were read and approved.

The Marquess Albrecht de Hohenkubin, Messrs. C. A. Whitton and Haridas Majumdar Choudhury were elected Fellows of the Society.

Captain W. H. Pasley-Williamson and Messrs. J. W. Bridge and H. V. Morton were proposed for election.

Mr. H. Garside showed a 25-cent piece of British North Borneo of 1929, and a 10 cents (1934) and 1 cent (1930) of Sarawak.

Mr. W. Owston Smith exhibited two thalers of Charles II of Lorraine of 1569 to 1603.

Mr. W. Gilbert showed two folles of Domitius Domitianus, one with the rare reading LVCIVS.

Mr. Derek Allen exhibited a series of barbarous radiate coins from Richborough.

A paper on the Richborough radiate hoard of 1931 was read by Messrs. Stebbing, Mattingly, and Derek Allen. Mr. Stebbing described the circumstances of the find and the general features of its composition. Mr. Mattingly emphasized the internal evidence of late date and Mr. Derek Allen enforced this point by comparison with sceattas and thrymsas.

FEBRUARY 18, 1937.

ORDINARY MEETING.

V. B. CROWTHER-BEYNON, Esq., F.S.A., Vice-President, in the Chair.

The Minutes of the Meeting of January 21 were read and approved.

Captain W. H. Pasley-Williamson and Messrs. J. W. Bridge and H. V. Morton were elected Fellows of the Society. Mr. H. H. Ratcliffe was proposed for election.

Mr. Leopold G. P. Messenger exhibited the penny of British West Africa and of New Guinea of 1936, the only coins so far issued to bear the name of Edward VIII.

Mr. J. W. E. Pearce, F.S.A., read a paper entitled "**COM** and **COMOB** at Thessalonica", in which he examined the coinage bearing these legends and compared the dies and styles with coins of Thessalonica and showed the close connexion of the **COMOB** coins with Thessalonica.

MARCH 18, 1937.

ORDINARY MEETING.

V. B. CROWTHER-BEYNON, Esq., F.S.A., Vice-President, in the Chair.

The Minutes of the Meeting of February 18 were read and approved.

Mr. H. H. Ratcliffe was elected a Fellow of the Society and Mr. H. Nussbaum proposed for election. Messrs. J. W. Bridge, J. W. Notman, and W. E. Poole were admitted Fellows of the Society.

The Vice-President announced the death of the Society's President, Mr. Percy H. Webb, and moved the following resolution which was passed and ordered to be sent to his daughter, Mrs. Andrew :

That the Royal Numismatic Society desires to express its sense of the loss it has sustained by the death of one who for twenty-five years had held the office of Treasurer and for six years had presided over the Society with a grace and distinction which had gained for him not only the esteem but the affection of its Fellows.

The Society desires to express its sense of sympathy with the family in their loss and to assure them that Mr. Webb will long be remembered by Fellows of the Society not only as an ideal President but as a kindly friend, whose loss will be personally felt by the many Fellows of the Society who had come into contact with him in his long period of service to the Society and to the study he loved so well.

Mr. Allan paid a tribute to Mr. Webb's work for the Society as Treasurer and President, and Mr. Mattingly gave an appreciation of his services to Roman numismatics.

Mr. Gilbert exhibited a solidus of Constantius III (Cohen no. 1, wt. 68.5).

Mr. Derek F. Allen read a note on a lead trial piece of a penny of King Alfred in the British Museum.

APRIL 15, 1937.

ORDINARY MEETING.

F. A. HARRISON, Esq., F.Z.S., Librarian, in the Chair.

The Minutes of the Meeting of March 18 were read and approved.

Mr. H. Nussbaum was elected a Fellow of the Society.

Director A. v. Loehr and Dr. G. Galster were elected Honorary Fellows of the Society.

Mr. H. W. Taffs, M.B.E., exhibited a series of Coronation medals and a Maundy set of George VI.

Mr. L. A. Lawrence, F.S.A., exhibited a series of Coronation medals from Charles I to Edward VII.

Mr. H. Garside showed the penny of George VI of 1937 ; and New Guinea sixpence and threepence of 1935, and penny of Edward VIII of 1936.

Mr. W. Gilbert showed an aureus of Antonia (Cohen 1) wt. 118.5 gr., another of Germanicus (Cohen 1) wt. 119 gr., and a follis of Alexander the Tyrant (Cohen 2).

Mr. Derek Allen read a paper on Coronation medals in which he traced their history from Edward VI to the present day and dealt with the various aspects, religious, political, and commemorative that had been emphasized from time to time.

MAY 20, 1937.

ORDINARY MEETING.

V. B. CROWTHER-BENYON, Esq., F.S.A., Vice-President, in the Chair.

The Vice-President announced that the Council had nominated the Rev. E. A. Sydenham President for the remainder of the Session. The new President then took the chair and expressed his great appreciation of the honour done him in electing him to his office.

Messrs. L. G. P. Messenger and H. Garside were appointed Auditors.

The Minutes of the Meeting of April 15 were read and approved.

Mr. William Gilbert exhibited the following gold Papal coins :

1. Nicholas V, ducat, 54.0 gr. (1447-1455). *R.* St. Peter.
2. Alexander VI, double ducat, 104.5 gr. (1492-1503). *R.* St. Peter fishing.
3. Julian II, double ducat, 104.5 gr. (1503-1513). *R.* ditto.
4. Leo X, ducat, 51.5 gr. (1513-1521). *R.* ditto.
5. Innocent, XII, scudo d'oro, 51.5 gr. (1697). *R.* Sheaf of wheat.
6. Benedict XIV, zecchino, 52.5 gr. (1751). *R.* Church on clouds.
7. Clement XIV, ducat, 53.0 gr. (1769). *R.* ditto.
8. Pius VII, doppia, 83.5 gr. (1806). *R.* St. Peter seated.
9. Pius IX, 2½ scudi, 67.5 gr. (1855). *R.* Value and date wreath. *M M.* "R".
10. Pius XI, 100 lire, 135.5 gr. (1929). *R.* The Saviour standing ; a small child at his feet offers him a crown.

Mr. Henry Garside showed the British Imperial King George VI silver two shillings, shilling with the Royal Crest of Scotland on the reverse, and sixpence ; also a bronze halfpenny and farthing : all dated 1937 ; also the British West Africa King Edward VIII nickel penny bearing the mint-mark H (Heaton) on the obverse, half-penny, and tenth of a penny : all dated 1936.

Mr. J. Allan read a paper by Dr. Karl Pink on " Gold Medallions of Lysimachus and kindred Forgeries ". (This paper is printed in this volume of the *Numismatic Chronicle*, pp. 73-90.)

Mr. Mattingly read a paper by Messrs. J. G. Milne and R. G. Goodchild entitled " Greek coins found at Exeter reconsidered ". (This paper is printed in this volume of the *Numismatic Chronicle*, pp. 124-134.)

JUNE 17, 1937.

ANNUAL GENERAL MEETING.

REV. EDWARD A. SYDENHAM, M.A., President, in the chair.

The Minutes of the Annual General Meeting of June 18, 1936, were read and approved.

Messrs. D. C. Sassoon and R. B. Whitehead were appointed scrutineers of the ballot.

Mr. Henry Garside exhibited the following coins:

British Imperial King George VI silver half-crown and shilling with the Royal Crest of England on the reverse, both dated 1937; Australia King George VI silver crown, dated 1937; British West Africa King Edward VIII nickel penny, bearing the mint marks KN, and halfpenny, both dated 1936.

The following report of the Council was laid before the Meeting.

The Council have again the honour to lay before you the Annual Report on the state of the Royal Numismatic Society.

They regret to announce the deaths of the following Honorary Fellow:

Professor Wilhelm Kubitschek;

and of the following seven ordinary Fellows:

A. H. Baldwin

A. B. Triggs

Rev. J. A. Vanes

Michel P. Vlasto

Percy H. Webb

W. I. Williams

A. W. Young

They have also to report the resignation of the following seven Fellows:

Rev. A. H. Baird

A. Leigh Barker, Esq.

C. C. Browne, Esq.

T. H. B. Graham, Esq.

Dr. F. F. Kraus

F. W. Lincoln, Esq.

Professor E. J. Rapson

On the other hand they have to announce the election of the following two honorary Fellows :

Dr. Georg Galster | Dr. A. v. Loehr

and of the following fifteen ordinary Fellows :

J. W. Bridge, Esq.	W. E. Poole, Esq.
H. M. Choudhury, Esq.	H. H. Ratcliffe, Esq.
Comte Chandon de Briailles	Mrs. T. Leslie Shear
Michael Grant, Esq.	David F. Spink, Esq.
Count Albrecht de Hohen- kubin	J. D. Anthony Thomp- son, Esq.
H. V. Morton, Esq.	Captain Pasley-William- son
J. W. Notman, Esq.	C. A. Whitton, Esq.
H. Nussbaum, Esq.	

The state of the Society compared with the corresponding period last year is therefore :

	Ordinary.	Honorary.	Total.
June, 1936	213	11	224
Since elected	15	2	17
	<hr/> 228	<hr/> 13	<hr/> 241
Deceased	7	1	8
Resigned	7	—	7
	<hr/> 214	<hr/> 12	<hr/> 226

The Council have also to report that they have awarded the Society's medal this year to Professor Victor Tourneur, Conservateur en Chef de la Bibliothèque Royale de Belgique and President of the International Numismatic Commission, in recognition of his contributions to medieval and English numismatics.

The Treasurer's Report, which follows, was read by Mr. Messenger in the absence of the Treasurer.

STATEMENT OF RECEIPTS AND DISBURSE-

YEAR ENDING

Dr.

THE SOCIETY IN ACCOUNT WITH

	£	s.	d.	£	s.	d.
<i>To cost of Numismatic Chronicles (four numbers)</i>	358	17	7			
„ <i>Rent</i>	70	0	0			
„ <i>Printing, Postages, and Stationery</i>	20	17	4			
„ <i>Refreshments, &c.</i>	5	0	11			
„ <i>Lantern Expenses</i>	12	15	0			
„ <i>Insurance</i>	3	15	0			
„ <i>Sundries</i>	9	10	0			
				480	15	10
„ <i>International Congress of Numismatics 1936—</i>						
<i>Net cost of Centenary Dinner, Printing, &c.</i>				19	19	10
„ <i>Stock of Centenary Medals</i>				69	17	6
„ <i>Balance at Bank 31.5.37 carried forward—</i>						
<i>General Account</i>	388	15	5			
<i>Research Account</i>	6	0	0			
				394	15	5
				£965	8	7

MENTS OF THE ROYAL NUMISMATIC SOCIETY

31st May, 1937.

G. C. HAINES, HON. TREASURER.

Cr.

	£	s.	d.	£	s.	d.
<i>By Balance at Bank 31. 5. 36 brought forward—</i>						
General Account	243	8	3			
Research Account	5	10	0			
				248	18	3
„ Entrance Fees	16	16	0			
„ Life Membership Fee	31	10	0			
„ Subscriptions	294	17	0			
				343	3	0
„ Sales of Numismatic Chronicles				103	2	0
„ Dividends and Interest						
£200 5% Conversion Stock 1944-64 (N.B. Market Price @ 112½, £225 15s. 0d.)	10	0	0			
£1,100 London, Midland and Scottish Railway, 4% Preference Stock (N.B. Market Price @ 86½, £951 10s. 0d.)	44	0	0			
	54	0	0			
Less Income Tax deducted	12	17	9			
				41	2	3
„ International Congress of Numismatics 1936—						
Balances in Hand transferred				187	5	7
„ Sale of Centenary Medals				41	17	6
				£965	8	7

G. C. HAINES, Hon. Treasurer.

Audited and found correct,

LEOPOLD G. P. MESSENGER, }
HENRY GARSIDE, } Hon. Auditors.

June 15, 1937.

The Reports of the Secretary and Treasurer were adopted on the motion of the President.

The President then handed the Society's Medal to Mr. Allan to forward to Professor Tourneur and said :

The Council has this year decided to award the Society's Medal to Professor Victor Tourneur, Conservateur en Chef of the Royal Library of Belgium, President of the Belgian Numismatic Society, and Editor of the *Revue de Numismatique Belge*.

M. Tourneur entered the Cabinet des Medailles of the Royal Library some 30 years ago, and, after rising to be head of it, was in 1929 appointed Director of the Royal Library. After many years' service as Secretary he became President of the Belgian Numismatic Society. He has done much work for International co-operation in numismatics and is President of the permanent International Numismatic Commission, under whose auspices our Congress was held last year. He has also done much to encourage the study of numismatics in Belgium by the courses of lectures he has given in the University of Brussels. The successful revival of the Belgian Numismatic Society after the War and the prosperity which has since followed it is largely the work of M. Tourneur.

He has been a voluminous contributor to the *Revue Belge*. We need not here mention the countless reviews and short notes which he has contributed to its columns, nor can we detail all the contributions he has made to the study of the coinage of his native land. His work has been mainly in two fields, ancient and medieval. Of his work on Classical Numismatics we would mention his articles on the Coins of the Imperial naval bases of the Greco-Roman East, on the Arras Hoard, and on the staters of Philip II and their imitation in Belgium.

Professor Tourneur's work on Medieval Numismatics is characterized by a wide knowledge of the documents, and his researches in the archives of the cities of Belgium have enabled him to throw much light on the history of its

coinage and particularly on its medals. Of his work on Belgian coins we might mention his study of the Mint of Bruges under Austrian domination and his Catalogue of Belgian Medals in the National Collection. Of his many contributions to the history of the Renaissance in the Netherlands we would mention his studies on the remarkable fourteenth-century medals of Heraclius and Constantine ; on the life and work of Conrad Bloec, Jean Symons, and Jacques Jonghelin ; his monograph on the medal of the poet Johannes Secundus and his remarkable work on Jehan de Candida, medallist and diplomat. In conclusion we would mention two works of special interest to Englishmen, his monograph on Stephen van Herwijck, who did much work in England in the sixteenth century and was long erroneously known as Stephen of Holland ; and his identification of the English mint-engraver, Alexandre de Bruchsell ; both of which appeared in the *Numismatic Chronicle*. The latter article was actually written by Sir George Hill based on material supplied by M. Tourneur. It is a peculiar pleasure to award the Medal to a continental numismatist of such distinction, who has at the same time made important contributions to our knowledge of English numismatics.

The following letter of thanks from Professor Tourneur was read by the Secretary :

Dear Mr. Secretary,

It was a very proud hour of my career when I read your unexpected letter telling me that the Royal Numismatic Society propose to award to me their medal for 1937.

I am not able to find the right words to express the high appreciation I have of the very great honour you will confer upon me : my English is very deficient and I must ask you to excuse it.

For over thirty years I have devoted my whole scientific activity to the study of numismatics. But I yet have not written thick books. If I am conscious of having been at all successful in clearing up some crucial problems, I had never thought that this would be sufficient to attract the attention of your learned Society. I have spent perhaps too much time to research in the records. To take an

example, I worked ten years in all to write 125 pages on Jehan de Candida, but everything I could assert was genuine and previously unknown. I see now that my humble efforts have been detected, and appreciated: it is the reason why I feel specially happy.

I thank the Council of the Society with all my heart for having chosen me as their medallist in this year; I however think that they did not reward one who has completed his task, for I trust to deserve in the future more fully the precious distinction which is already to-day my share.

I would have been delighted if I could have travelled in June to London to receive the medal in person, but at that time it was impossible for me; I beg you to excuse my absence at the meeting and to express my regrets.

Very truly yours,
Victor Tournour.

The President then delivered the following address:—

THE PRESIDENT'S ADDRESS

It rarely happens that a President of this Society is called upon to deliver a Presidential Address on almost the first occasion that he occupies the chair. That it so happens this evening is due to the fact that the death of our late honoured and beloved President, coming so unexpectedly (as it seemed to most of us) in the earlier part of the present year, has necessitated the appointment of a successor before the expiration of the Numismatic Session.

In entering upon the office and duties of President at this Annual Meeting of our Society I wish first to assure the Council and Fellows of my appreciation of the honour which their vote has conferred on me. But, as I look back upon Presidents whom I have known since I became a Fellow of the Society, Sir Arthur Evans, Sir Charles Oman, Sir George Macdonald, and Mr. Percy Webb, and call to mind former Presidents, whose names and achievements have become part of the history of the Royal Numismatic Society, I can scarcely view the prospect of attempting to

follow them without a certain amount of personal misgiving. It is, however, the part of every student of Numismatics, or of any other branch of learning, to make his own contribution, not in the spirit of emulation, but with an honest desire to advance the interests of that subject to the utmost of his powers. Prompted by this consideration, and this alone, I venture to accept both the honour and duties of President, trusting that such modest contribution as I can offer may not be entirely without value to the Science of Numismatics and also towards the advancement of our Society.

This Session, now drawing to its close, coincides with a momentous period of our National history, the true importance of which may be better appreciated in time to come when events have been duly chronicled and can be viewed in fuller perspective. Suffice it to say that we have passed through a grave national crisis, such as in bygone times and perhaps in countries other than our own, would have plunged the nation into civil war. As it is, the king, who granted his patronage to this Society a year ago, has quietly abdicated and his successor has been acclaimed and duly crowned amidst unparalleled scenes of public rejoicing. Although it is now more than a month since the Coronation, vestiges of pageantry have not entirely vanished and the shouting has scarcely faded to its last echo. So before we close our Session, it seems fitting that, as a Society that has long enjoyed Royal Patronage and has received that of our new king, George VI, we should record our thankfulness for the peaceful ordering of events, to which we add our heartfelt prayers for every blessing on our King and Queen.

It is, perhaps, a source of some regret to numismatists that the events of the past year are so inadequately recorded on our national coinage. More particularly as the sequence of royal portraits has been broken. The philatelist has been fortunate enough to secure postage stamps with the portrait of Edward VIII, but the numismatist has waited in vain for a corresponding issue of current coins of the realm. Coins with the portrait of Edward VIII have, as we know, actually been struck, but as they bear the date 1937, they have

not been put into circulation. Consequently we possess no record of the period between February and December 1936 on the official coinage. True, we have medals which state that Edward VIII was crowned at Westminster on May 12, 1937, and others that record his abdication on December 10, 1936, as well as others which commemorate the actual coronation of George VI and Queen Elizabeth. If in some future age, let us say a thousand years or so hence, specimens of all these medals chance to fall into the hands of numismatists of the period, we predict that they will find themselves faced with a chronological problem quite as involved as any of those which we, in our generation, strive to unravel! Yet, from this fanciful picture we may take to ourselves this amount of comfort, that as long as the world lasts there will still remain numismatic problems to be solved, and that the solving of them will always provide numismatists with fresh interests.

This hiatus between the coinages of George V and George VI tempts one to draw a contrast between our present-day methods and those of Imperial Rome, when the officials of the mint certainly acted more promptly. But for this promptness we should probably possess no portraits of short-lived emperors, such as Otho, Didius Julianus, or Quintillus, and we should not even know the names of the ephemeral "Thirty Tyrants". Indeed, the Roman mintmasters deserve our undying gratitude for the amount of history they impressed upon their coins.

Here, in passing, a word about the new coins of George VI, specimens of which have already been exhibited at one of the Meetings of the Society.

The advent of a new coinage is generally the signal for a volley of facetious witticisms. Of course no time has been lost in firing the volley through the medium of the Press. But having fired it off, everybody accepts the coins without troubling further about their designs. In these days it is difficult to be original and practical at the same time. Hence, perhaps, the tendency on the part of coin designers to keep within the limits of the commonplace. However,

in praise of the new designs, it must be said that, besides the excellence of the King's portrait, the efforts in the direction of originality seem to be fully justified.

The ship on the halfpenny, although technically puzzling from a nautical point of view, avoids the awkward lines of a modern battleship and gives a distinctive character to this denomination.

Similarly, the wren on the farthing adds a touch of quaintness and possibly provokes a smile. But, then, how many of us take farthings seriously?

The most daring innovation is, of course, the twelve-sided three-pence, which has provoked more criticism than any of the coins. Artistically, it is quite on a level with the rest; and possibly not many people knew before that there is such a thing as a Thrift plant. With regard to its unusual shape, it does not appear worse than a serrate coin and is certainly preferable to the colonial ones with holes in the middle. Whether or not this incongruity will be outweighed by any practical advantages must be left for time to prove.

Turning to matters more intimately connected with our Society we must perforce strike a note of sadness as we recall the loss we have sustained through the death of our President, Mr. Percy H. Webb. I referred to him just now as our honoured and beloved President, and I think it is thus that we shall all like to remember him, since he made a point of becoming personally acquainted with every member of the Society, and to the end, every Fellow of the Society was a personal friend of his.

Mr. Percy H. Webb, who died at his home, The Garden, Walton-on-Thames, on March 4, in his 81st year, was a member of a family which for several generations had produced archaeologists and architects. Born in Hampshire and educated at Marlborough, he qualified as a solicitor and had been in practice in West Smithfield for over half a century. He also played an important part in public life at Walton-on-Thames. He was also an active member of the Surrey Archaeological Society and contributed to its Collections and to those of the Sussex Archaeological Society.

He had been a collector of coins from boyhood and found time amidst a very busy life in his profession to acquire a European reputation as an authority on the coins of the Roman Empire, especially of the third century.

Mr. Webb was elected a Fellow of the Royal Numismatic Society in 1901, and was appointed Treasurer in 1906. After holding this office for a quarter of a century, he was elected President in 1930 and held this office till 1935. He had just entered upon a second period of office in October last. During his long and difficult period of office as Treasurer, Mr. Webb managed the finances of the Society so well that in spite of the war and all its far-reaching effects, increased cost of printing, higher rent, and reduced membership, he left the Society in a stronger position than he found it.

In 1921 he was awarded the Society's Medal.

As President he gave us the very best of his powers, and imparted to us that living interest in Numismatic studies that animated him to the last.

In addition to numerous contributions to the *Numismatic Chronicle*, he was the author of a work on the Coinages of Carausius and Allectus, which, although written as far back as 1907, remains the standard work on the subject. His greatest work, however, is the fifth volume of the *Roman Imperial Coinage*, in two parts, numbering over 1,200 pages, and covering the period A.D. 253-296. In this work Mr. Webb was to a large extent ploughing new ground, involving a vast amount of labour and research, with the result that we have, for the first time, a scientific conspectus of this most involved period of the Roman coinage.

As one of the joint-editors of *Roman Imperial Coinage* I should like to add my personal appreciation of this notable contribution. When Mr. Mattingly and I embarked on a compendious work on coins of the Roman Empire we could not foresee all the difficulties and pitfalls that lay before us; and the consciousness that we have not always shown ourselves superior to them is certainly a chastening reflexion. Equally certain is it that without the co-operation of our

good friend, Percy Webb, volume V would not have been written—at least, not for many years to come.

The success of the International Numismatic Congress held in London last Summer was mainly due to his careful organization.

During the War, Mr. Webb did a great deal of work for Belgian refugees and received the Medal of King Albert of Belgium. For other war work he received the M.B.E. and the thanks of the New Zealand Government. He unfortunately did not live to know that the Numismatic Society of Holland had conferred its Medal on the Society in honour of its Centenary. The Medal and letter accompanying it reached the Society on the day he died.

We regret also to record the death, during the past year, of five Fellows and one Honorary Fellow of the Society :

Professor J. W. Kubitschek, Director of the Department of Ancient Coins in the Austrian Museum and Professor at the University of Vienna, was elected an Honorary Fellow in 1904. He was one of the chief reviewers for the *Numismatische Zeitschrift* and the author of numerous works and articles. Amongst these may be mentioned his work on Select Medallions in the Austrian Museum and *The Roman Tribes*; also monographs on Nerva, Marcus Aurelius, and Verus. Professor Kubitschek was an eminent scholar and the range of his knowledge was enormous. Being thoroughly conversant with many branches of archaeology, he brought this wide knowledge to bear upon Numismatics with valuable results.

M. Michel P. Vlasto, who was elected in 1889, was well known to many of us. He lived in England for a number of years, and frequently came here even after going to Marseilles. He retired to Athens some years ago. He had a remarkable collection of coins of Tarentum, a series in which he had specialized. His contributions to the *Chronicle* include "Rare and Unpublished Coins of Taras" (1907, pp. 277-90); "A Find of Coins struck during the Hannibalic occupation of Tarentum" (1909, pp. 253-63); "Coins

of Metapontum and Tarentum" (1920, pp. 277-81); "The Warren Hoard of Tarentine Horsemen" (1930, pp. 107-63); "A Find of Tarentine Nomoi from Italy" (1922, pp. 245-7); "Alexander, son of Neoptolemos of Epirus" (1926, pp. 154-231). To the series of the American Numismatic Society's Monographs he contributed an important study of Tarentine coins, entitled, *Taras Oikistes*.

Mr. A. B. Triggs, one of our Australian Fellows, was elected in 1894. He had a very fine collection of Greek, Roman, and English coins, of which a catalogue was published by Messrs. Spink & Son in 1924.

Mr. W. I. Williams, who was elected in 1910, was better known to the Librarian than to the rest of us, as he was rarely in town.

Mr. A. W. Young, elected in 1890, was one of our oldest Fellows, but had not attended the Meetings for many years.

Mr. A. H. Baldwin was elected a Fellow in 1902. For the past forty years he has been well known to every collector of coins, and to him and his remarkable faculty of procuring coins every collector owes a debt of gratitude. He was, moreover, a student and an ardent collector himself; and through the actual handling of coins had acquired a wide knowledge of them.

The Rev. J. A. Vanes became a Fellow in 1916.

We have also to report the resignation of the following seven Fellows: The Rev. A. H. Baird, Mr. A. Leigh Barker, Mr. C. C. Browne, Mr. T. H. B. Graham, Dr. F. F. Kraus, Mr. F. W. Lincoln, and Professor E. J. Rapson.

On the other hand, it is pleasant to announce the election of the following two Honorary Fellows, Dr. Georg Galster and Director A. v. Loeher; and fifteen ordinary Fellows of the Society, Mr. J. W. Bridge, Mr. H. M. Choudhury, Comte Chandon de Briailles, Mr. Michael Grant, Count Albrecht de Hohenkubin, Mr. H. V. Morton, Mr. J. W. Notman, Mr. H. Nussbaum, Mr. H. H. Ratcliffe, Mrs. Leslie Shear, Mr. David F. Spink, Mr. W. E. Poole, Mr. J. D. Anthony Thompson, Captain Pasley-Williamson, and Mr. C. A. Whitton.

Our total membership at the present time stands at 226 as against 224 in June 1936.

We give a hearty welcome to all our recently elected Fellows, many of whom will, I hope, become active members of the Society. In our Meetings they will find many a common interest and, I will undertake to say, much good fellowship.

In making a report of the papers read to the Society, it appears to have been the custom at the General Meeting for the President to give a résumé of each paper, to which he has generally added some comments or criticisms of his own. But this evening I trust I may be pardoned if I deviate to some extent from this custom. My reasons for doing so are (1) as the papers will, in due course, appear in the *Chronicle*, where they may be read and digested at leisure, it seems rather superfluous to epitomize them beforehand; and there is always the danger of misrepresenting the author in the process; (2) since greatly to my regret, I have been debarred from attending all but a few Meetings, I am not in a position either to summarize, or to comment on, many of the papers.

For the substance of the following brief report I am largely indebted to the Secretary and Mr. Mattingly, to whom I wish to express my sincere thanks. I merely add a few remarks that have occurred to me in connexion with some of the subjects.

Beginning with matters relating to the earlier history of our own country was a paper, written jointly by Messrs. W. P. D. Stebbing, H. Mattingly, and Derek Allen, on a large hoard of barbarous coins from Richborough.

The day when students and collectors spurned these small and artistically unattractive coins is happily past. Of late they have received a good deal of attention and large hoards, such as the Lydney, Hayle, and others, have been classified and considerable headway has been made towards placing them in their historical setting. The Richborough hoard has added at least one piece of valuable information since it contained examples of the radiate head combined with the

FEL. TEMP. REPARATIO type, thereby ruling out the view that all the radiate coins necessarily belong to an earlier date. Mr. Stebbing, whose connexion with Richborough is well known, and Mr. Mattingly suggested the fifth century as being the period to which the coins probably belong. Mr. Derek Allen, whose studies are directed to the English series, inclined to place them somewhat later on account of their similarity to early Saxon coins. At any rate, it seems certain that these ill-struck and under-sized coins belong to the Dark Age when Roman Britain, deprived of military and political help from Rome, gradually lapsed into a state of weakness and poverty. Indeed, these barbarous and poverty-stricken coins are some of the few relics left to us from an age concerning which historians are so strangely silent.

Eminently appropriate to the present year was Mr. Derek Allen's paper on Coronation medals, handled in a manner that was both scholarly and racy. We shall look forward to reading it in the *Chronicle* later on.

French medals of the Second Revolution formed the subject of a paper by Dr. Fairbairn (also read at the Congress). As a specialist on this period of French history Dr. Fairbairn is unrivalled, and in dealing with the medals he brought the most intimate knowledge of the times to bear on the subject.

Mr. J. W. E. Pearce is equally at home in the fourth century and has for many years studied the intricacies of the Theodosian coinage. His paper on the attribution of the **COMOB** coins of Theodosius is, therefore, a valuable addition to our knowledge of the period. He re-examined the traditional view that all the **COMOB** coins belong to the Roman mint and pointed out the strong resemblances of some of these coins to issues from Thessalonica.

Dr. Pink, in a communicated paper, dealt with "Some Seventeenth-century Forgeries" of the Lysimachus type. The subject, illustrated by casts and photographs, was of a very restricted character and Dr. Pink dealt with it in considerable detail. It was his close reasoning that gave to

the paper its undoubted value. Forgeries of Greek coins, of which these of the Lysimachus class are noteworthy examples, are often extremely subtle and can only be distinguished from genuine specimens by the minutest comparison of details. Further studies on similar lines would be of the greatest practical value to collectors.

"Greek Coins found at Exeter" formed the subject of a paper communicated by Dr. J. G. Milne. Quite apart from the interest of the question, a re-examination of it was certainly needed. Since the publication in 1840 of Shortt's description of coins found in and around Exeter, and the subsequent housing of the coins in the Exeter Museum, doubts have been thrown on their authenticity as local finds. Dr. Milne, in a careful examination of the evidence, comes to the conclusion that these doubts are groundless and regards many of the Exeter finds of Greek coins as entirely above suspicion. Dr. Milne's paper serves a wider purpose than merely the vindication of a few coins found at Exeter and undoubtedly has an important bearing on the larger problem of the Greek coins found in this country generally. In this direction lies an interesting channel of inquiry, and we shall look forward to a fuller discussion of it in some future paper.

Following one of those interesting side-lines of Numismatics was a paper read by Mr. L. A. Lawrence on the casting counters of the thirteenth and fourteenth centuries, in which he showed that the earliest counters for use with the abacus could be dated very closely by comparison with the types of Edward pennies from which they were copied. In explaining the use of these counters he suggested that they were pierced to prevent their being passed as coins. These counters appear to have been made at the Mint and show remarkable parallelism with the coins.

In the province of Numismatic literature there has been the usual amount of activity during the past year, with the result that we have before us a long and varied list from which it is only possible to select a few works. Taking first some on Greek Numismatics:

Mr. Robinson has brought out the final part of volume ii of the *Sylloge* comprising the famous Lloyd Collection. Mention was made in the Proceedings of the Society, published in the *Chronicle* last year (see p. 29) of earlier parts of this important work. This last instalment, which in point of general excellence is quite up to the standard of its predecessors, deals with the Syracusan and Siculo-Punic coinages and contains valuable information on the re-attribution of the coins.

M. Jean Babelon has published the text and plates of the fourth volume of the *Catalogue de la Collection de Luynes*, which includes the coinages of Syria, Numidia, &c. The work is issued under the auspices of the Département des Médailles in the Bibliothèque Nationale, Paris.

On the Roman Series, W. Hüttl has completed his work on the reign of Antoninus Pius, a special feature of which is the application of Numismatics to History.

G. Elmer has written a monograph on the coinage of Eugenius, published in the *Numismatische Zeitschrift*. In conjunction with this we may mention an article on the same subject by Mr. J. W. E. Pearce that has already appeared in the *Chronicle*.

Vol. iv, part 1 of *Roman Imperial Coinage* (Mattingly and Sydenham) came out just before the Congress last summer. This covers the period from Pertinax to Geta. We hope that Part 2, which will probably be slightly shorter than Part 1, will be in the printer's hands before the end of the present year.

The suggestion was made some time ago that a series of lectures on Numismatic subjects should be prepared, and be available for Meetings of the Society when required. I am glad to announce that two such lectures are now ready; one by Mr. Mattingly on "Coins of the Roman Republic" and another by Mr. Derek Allen on "English Coins".

A general Report of the International Congress held in connexion with the Centenary of the Royal Numismatic Society has already appeared in the *Chronicle* (1936, pp. 34-67). It is, therefore, unnecessary for me to say more this

evening. All of us who attended the Meetings, as well as many who were unable to do so, are looking forward to the publication in book form of the *Proceedings* of the Congress. I am assured, however, that the volume, the editing of which has entailed considerable labour, is expected to be ready shortly.

Thus far I have tried to review the past, its activities, its regrets, and its encouragements. Now a word as to the future. Next October we shall begin another series of meetings, lectures, and discussions, and I want to assure you of my sincere intention of doing everything within my power to make these meetings both successful and interesting and to promote the welfare of our Society generally.

I have heard it hinted that Meetings are sometimes inclined to be dull, and that it would be well to devise something towards brightening them up. Of course, we are a serious Society, and the introduction of anything approaching levity would ill accord with the studies with which we are concerned. Any suggestion, however, that may tend towards increasing the interest at Meetings will be welcomed and will be duly considered by the Council. In the meantime, there are two suggestions that I should like to make: (1) that besides papers on specialized subjects, which are not only valuable but essential, there should be two papers during the Session of a more general character, such as would lead to discussion in which every one would find some interest; (2) that on the evenings devoted to exhibitions a definite subject should be announced beforehand and Fellows should be invited to exhibit specimens in connexion with it. This need not exclude miscellaneous exhibits, but would, at the same time, create a centre of interest. These are merely suggestions. I hope we may receive other, and possibly better ones, from some of our Fellows.

In conclusion I must ask your indulgence for any shortcomings or omissions in this Address. You will no doubt realize that it is very difficult to give an adequate review of a year's activities unless one has made notes from time to time, as things occur. But for the preparation of this

Address most of the notes had to be collected within the past week; hence the result lacks the completeness that one would desire.

Mr. Crowther-Benyon proposed and Mr. Harrison seconded a vote of thanks to the President for his address.

The result of the ballot for office-bearers for 1937-8 was announced as follows:—

President.

REV. EDWARD A. SYDENHAM, M.A.

Vice-Presidents.

HAROLD MATTINGLY, Esq., M.A.

PROFESSOR SIR CHARLES OMAN, K.B.E., M.A., D.C.L.,
LL.D., F.S.A., F.B.A.

Treasurer.

G. C. HAINES, Esq., F.S.A.

Secretaries.

JOHN ALLAN, Esq., M.A., F.S.A.

E. S. G. ROBINSON, Esq., M.A., F.S.A.

Foreign Secretary.

WILLIAM GILBERT, Esq., M.S.A.

Librarian.

FREDERICK A. HARRISON, Esq., F.Z.S.

Members of the Council.

C. E. BLUNT, Esq., F.S.A.

H. J. DAKERS, Esq., M.A.

LADY EVANS, M.A. (OXON. and DUBL.).

S. H. FAIRBAIRN, Esq., M.A., M.D.

HENRY PLATT HALL, Esq.

LEOPOLD G. P. MESSENGER, Esq.

CHARLES CHICHELE OMAN, Esq., M.A.

B. H. ST. J. O'NEIL, Esq., M.A., F.S.A.

W. OWSTON SMITH, Esq., M.A.

R. B. WHITEHEAD, Esq., M.A., F.A.S.B., M.R.A.S.

The President proposed a vote of thanks to the auditors and scrutineers of the ballot, and adjourned the Society until October 21.